

City of Pembroke Pines Planning & Economic Development Department 601 City Center Way 3rd Floor Pembroke Pines FL, 33025

Summary

Agenda Date:	September 9, 2021	Application ID:	SP 2021-08		
Project:	Tesla Charging Station At Wawa Hiatus Road	Project Number:	PRJ 2021-10		
Project Planner:	Cole Williams, Planner / Z	oning Technician			
Owner:	Imperial Hornet Developers Florida LLC Wawa Inc Finance dep	Agent:	Sheryl Blasi		
Location:	1600 South Hiatus Road				
Existing Zoning:	B-3 (General Business)	Existing Land Use:	Irregular 5.52 du/acre flexed to Commercial		
Reference Applications:	SP 2017-03, ZV 2017-14, ZV 2017-04, ZV 2017-03, ZV 2017-02, ZC 2017-02, SP 2015-01, SP 2014-22, MSC 2010-07, SP 2008-02, MSC 2007-71, SP 2006-53, ZC 2005-06, ZC 2005-07, ZC 2003-02, AM 2003-07				
Applicant Request:	Installation of 8 Tesla charging stations				
Staff Recommendation:	Approval				
Final:	⊠Planning & Zoning Board	□City Commission			
Reviewed for the Agenda:	Director:	Planning Administrator:			

Project Description / Background

Sheryl Blasi, agent, is requesting approval for the installation of 8 Tesla charging stations, associated equipment and landscaping in the northernmost parking field of the existing Wawa gas station at 1600 S Hiatus Road.

Wawa gas station was approved through site plan application SP 2017-03. No modifications have been made to the site since completion.

BUILDINGS / STRUCTURES:

The applicant proposes the installation of the following equipment:

- The installation of 8 charging posts occupying 8 parking spaces.
 - o Each charging post will be approximately 5.5 feet high.
 - Each charging space will be depicted by a 1.5 square foot Tesla Vehicle charging sign mounted at 6 feet.
 - Charging station parking will be exclusive for electric vehicles only. Based on use 39 parking spaces are required. Currently, 59 parking spaces are available on site. With the reduction of 8 spaces for electric vehicle charging, 51 parking spaces will remain on site for public use.
- Installation of 2, 7.5' tall V3 Supercharger cabinets.
- Installation of 1 utility transformer

Additionally, minor curb modification, restriping and the relocation of a light pole is proposed to accommodate the new charging stations.

LANDSCAPING:

The proposed equipment shall be screened by Galphimia Gracilis (Thryallis) and Spartina Bakeri, (Sand Cordgrass)

No other modifications are proposed at this time.

Staff has reviewed the proposed changes and finds that the proposal meets code requirements. Staff therefore recommends approval of this application.

Enclosed: Miscellaneous Plan Application

Memo from Planning Division (8/9/21)
Memo from Engineering Division (7/29/21)
Memo from Landscape Division (7/28/21)
Memo from Zoning Administrator (7/28/21)
Memo from Planning Division (7/22/21)
Memo from Engineering Division (6/10/21)
Memo from Zoning Administrator (6/9/21)

Memo from Landscape Division (6/8/21) Memo from Fire Prevention (6/3/21) Site Plan Site Aerials



City of Pembroke Pines Planning and Economic Development Department Unified Development Application

Planning and Economic Development					
City Center - Third Floor 601 City Center Way Pembroke Pines, FL 33025 Phone: (954) 392-2100 http://www.ppines.com	Prior to the submission of this application, the applicant must have a pre-application meeting with Planning Division staff to review the proposed project submittal and processing requirements.				
ntip://www.ppineg.com	Pre Application Meeting Date:				
	# Plans for DRCPlanner:				
Indicate the type of application you are Appeal*	e applying for: Sign Plan				
Comprehensive Plan Amendment					
Delegation Request	☐ Site Plan Amendment*				
DRI*	☐ Special Exception*				
☐ DRI Amendment (NOPC)*	Variance (Homeowner Residential)				
Flexibility Allocation	Variance (Multifamily, Non-residential)*				
☐ Interpretation*	Zoning Change (Map or PUD)*				
☐ Land Use Plan Map Amendment*	Zoning Change (Text)				
Miscellaneous	Zoning Exception*				
☐ Plat*	Deed Restriction				
INSTRUCTIONS:					
	this application. If not applicable, mark N/A.				
2. Include all submittal requirements / a 3. All applicable fees are due when the					
 All applicable fees are due when the application is submitted (Fees adjusted annually). Include mailing labels of all property owners within a 500 feet radius of affected site with signed affidavit (Applications types marked with *). 					
	ater than noon on Thursday to be considered for				
6. Adjacent Homeowners Association	ns need to be noticed after issuance of a project				
	before hearing. (Applications types marked with *).				
	dressing staff review comments in a timely manner. ctive for over 6 months will be removed from staff				
	will be required with applicable fees.				
8. Applicants presenting demonstration	on boards or architectural renderings to the City				
Commission must have an electron Division no later than the Monday pr	nic copy (PDF) of each board submitted to Planning receding the meeting.				
Staff Use Only					
Project Planner: $Cole$ Project #: PRJ 20 $2l$ - 10 Application #: $8l2021-08$ Date Submitted: 05127121 Posted Signs Required: 2 Fees: \$ $3,161^{00}$					
Date Submitted: <u>05127121</u> Posted	I Signs Required: (2) Fees: $3,16/6$				

SECTION 1-PROJECT INFORMATION:

Project Name:	Tesla Pembroke Pines 1600 Hiatus Rd.				
Project Address: 1600 S HIATUS ROAD, PEMBROKE PINES, 33025					
Location / Shopping	g Center:		***		
Acreage of Propert	y:	Building Square Fee	t:		
Flexibility Zone:		Folio Number(s):			
Plat Name:		_Traffic Analysis Zone (TAZ):			
Legal Description:	PEMBROKE LAKES S	OUTH 119-1 B TRA	CT G-3 LESS POR		
DESC IN OR 427	742/578				

Has this project bed	en previously submitted	? Yes	No		

Describe previous applications on property (Approved Variances, Deed Restrictions, etc...) Include previous application numbers and any conditions of approval.

Date	Application	Rēquest	Action	Resolution/ Ordinance#	Conditions of Approval
		Andrew Control of the			

SECTION 2 - APPLICANT / OWNER / AGENT INFORMATION

Owner's Name: Maury Rice	
Owner's Address:	
Owner's Email Address:	
Owner's Phone:	Owner's Fax:
Agent: Tesla, Inc	, , , , , , , , , , , , , , , , , , ,
Contact Person: Sheryl Blasi	
Agent's Address:	
Agent's Email Address: sherylblasi@con	mcast.net
Agent's Phone: (305) 527-8180	Agent's Fax:
All staff comments will be sent direct writing from the owner.	ly to agent unless otherwise instructed in
SECTION 3- LAND USE AND ZONING IN	FORMATION:
EXISTING	PROPOSED
Zoning:	Zoning:
Land Use / Density:	Land Use / Density:
Use:	Use:
Plat Name:	Plat Name:
Plat Restrictive Note:	Plat Restrictive Note:
ADJACENT ZONING	ADJACENT LAND USE PLAN
North:	North:
South:	South:
East:	East:
West:	West:

-This page is for Variance, Zoning Appeal, Interpretation and Land Use applications only-SECTION 4 - VARIANCE • ZONING APPEAL • INTERPRETATION ONLY Application Type (Circle One): Variance Zoning Appeal Interpretation Related Applications: Code Section: Required: Request: Details of Variance, Zoning Appeal, Interpretation Request: **SECTION 5 - LAND USE PLAN AMENDMENT APPLICATION ONLY** ☐ City and County Amendment ☐ City Amendment Only Existing City Land Use: Requested City Land Use:

Requested County Land Use:

Existing County Land Use:

SECTION 6 - DESCRIPTION OF PROJECT (attach additional pages if necessary)

CONTROLLER INTEGRATED IN SWITCHGEAR, (1) SWITCHGEAR ASSEMBLY, 1) UTILITY TRANSFORMER AND CONCRETE PAD	2) V3 SL	IPERCHARGER CABINETS, (8) V3 CHARGING POSTS, (1) MASTER
1) UTILITY TRANSFORMER AND CONCRETE PAD	ONTRO	LLER INTEGRATED IN SWITCHGEAR, (1) SWITCHGEAR ASSEMBLY
	1) UTILI	TY TRANSFORMER AND CONCRETE PAD
	· · · · · · · · · · · · · · · · · · ·	
		

SECTION 7- PROJECT AUTHORIZATION

OWNER CERTIFICATION

all information	supplied herein is true and correct to	described in this application and that the best of my knowledge.
1	a fear	5/12/31
Signature of O	wner	Date
Sworn and Sul	oscribed before me this da	зу
of	, 20	
Fee Paid	Signature of Notary Public	My Commission Expires
AGENT	CERTIFICATION	
This is to certifiand that all info	y that I am the agent of the property mation supplied herein is true and o	owner described in this application correct to the best of my knowledge.
Signature of A	gent O	Date
Swom and Sub	oscribed before me this de	See Attath ment
Fee Pald	Signature of Notary Public	My Commission Expires

California Jurat Certificate

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

State of California	
County of LOS Angeles	\$.\$.
Subscribed and sworn to (or affirmed) before me on	,
20 21 by Maury Ric	and
	_, proved to me on the basis of
satisfactory evidence to be the person(s) who appear	red before me.
Somer Asulu COMMISSION#2704849 OPTIONAL INFORMA	TION
Description of Attached Document	
The certificate is attached to a document titled/for the purpose of	Method of Affiant Identification
Owner certification	Proved to me on the basis of satisfactory evidence form(s) of identification credible witness(es)
	Notarial event is detailed in notary journal on
	Page # Entry #
	Notary contact:
containing pages, and dated	Other Affiant(s) Thumborint(s) Describer
	Outerties, monophanies, pescure

California Jurat Certificate

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document

State of California	
County of LOS Angeles	S S
Subscribed and sworn to (or affirmed) before me on	this 17 day of May
2021, by Maury Rice	and
	_, proved to me on the basis of
satisfactory evidence to be the person(s) who appea	red before me.
Some Aguer Commission#2204849	
OPTIONAL INFORMA	TION
Description of Attached Document The certificate is attached to a document titled/for the purpose of	Method of Affiant Identification
	Proved to me on the basis of satisfactory evidence. form(s) of identification
containing pages, and dated	Other
	Affiant(s) Thumbprint(s) Describe

RE: Tesla Electric Supercharger Station - Pembroke Pines, FL To: City of Pembroke Pines To Whom It may Concern: Please find enclosed an original Letter of Authorization for David Hernandez, Installation & Construction Manager, Charging Infrastructure for Tesla, Inc. to sign any and all documents relating to City of Pembroke Pines Building Department for the Tesla EVC Charging Station located at: 1600 5 HIATUS ROAD PEMBROKE PINES, 33025 Please do not hesitate to contact this office with any questions. Best Regards, Sworn to and subscribed before me on this Day of _ Personally Known, or Produced ID Public_ Print Notary's Name: _ Oath taken _____Oath not taken Commission Expiration: Prepared by:

PLANNING DIVISION STAFF COMMENTS

Memorandum:

Date:

August 9, 2021

To:

SP 2021-08 file

From:

Cole Williams, Planner / Zoning Technician

Re:

Tesla Charging Station

Items that do not conform to the City of Pembroke Pines Code of Ordinances or other Governmental Regulations:

ALL COMMENTS REGARDING THIS APPLICATION HAVE BEEN ADDRESSED.

CITY OF PEMBROKE PINES PUBLIC SERVICES DEPARTMENT ENVIRONMENTAL SERVICES/ENGINEERING DIVISION

DRC REVIEW FORM



July 29, 2021

PROJECT: TESLA ELECTRICAL CHARGING STATIONS AT WA WA CITY REFERENCE NUMBER: SP 2021-08 & PRJ 2021-10

To: Cole Williams, Planner and Zoning Technician
Planning and Economic Development Department

From: John L. England, P.E.

Environmental Services/Engineering Division, Public Services Department (954) 518-9046

RECOMMENDATION:

The Environmental Services/Engineering Division's DRC 'Comments' for the proposed electric charging stations have been satisfied and the proposed project is hereby recommended for 'Consideration' by the Planning and Zoning Board.

NOTE that an Engineering Permit is required for construction of the proposed project site related improvements and directional bore. Submittal of appropriate signed and sealed plans/details and Plans Review Fee will be required, as a minimum, by the Environmental Services/Engineering Division for acceptance of the proposed project for initiation of the plans review for approval for Engineering Permit. A separate permit submittal to the Environmental Services/Engineering Division will be necessary, in addition to the submittal to the Building Department for any permits required to be processed through the Building Department.

MEMORANDUM

July 28, 2021

To: Cole Williams

Planner

From: Christian Zamora

Planner / Zoning Specialist

Re: (SP 2021-08) Tesla Charging Station – Wawa at Villages of Mayfair Outparcel

The City of Pembroke Pines Planning Division has conducted a landscape review for Tesla Charging Station – Wawa @ Villages of Mayfair Outparcel. The following items need to be addressed prior to this project being found in compliance:

1. Per plans, re-locating existing material. Need to provide plating replacement detail for tree / shrub being relocated. As per City of Pembroke Pines Landscape Ordinance 155.661 (E) "Utility structures, garbage, and refuse areas shall be screened with landscaping material to the extent that these areas are not visible at a maximum height of six feet from abutting properties or adjacent right-of-ways."

Landscape comments have been addressed (Sheet C-7/02/2021)

For Final Inspection, Irrigation must be working properly to ensure that all new and existing landscape material is adequately being irrigated. A "wet-check" shall be done at time of final inspection to ensure all irrigation heads are working properly etc.

It is also required that projects utilize best management practices set by Florida Friendly Landscape Standards and meet material Design and Installation Standards. City Code 155.664

Please contact me with any questions.

CHRISTIAN ZAMORA

Planner/ Zoning Specialist, Planning and Economic Development Department City of Pembroke Pines 601City Center Way
Pembroke Pines, FL 33025
954.392.2100 (Office) · czamora@ppines.com
Consider the environment before printing this email.

MEMORANDUM

July 28, 2021

To: Cole Williams

Planning/Zoning Technician

From: Dean A. Piper

Zoning Administrator

Re: SP 2021-08 (PRJ 2021-10 - Tesla Charging Stations @ Wawa)

All of my comments regarding the above Site Plan have been satisfied.

PLANNING DIVISION STAFF COMMENTS

Memorandum:

Date:

July 22, 2021

To:

SP 2021-08 file

From:

Cole Williams, Planner / Zoning Technician

Re:

Tesla Charging Station

Items that do not conform to the City of Pembroke Pines Code of Ordinances or other Governmental Regulations:

- 1. Provide completed public notice affidavit. Please provide.
- 2. Include a detailed scope of work letter. Include chargers, enclosures, transformers, landscape etc.... **Please proivde**
- 3. Provide full site plan with parking count for site. Parking spaces reserved for EV charge shall count against the total parking for site.
- 4. Provide details of screening for all mechanical equipment.
- 5. Provide length of parking spaces.
- 6. Provide color details for charging units. Not provided.
- 7. Provide all color chips / material samples to be used on site. Place on a color / material board. **Not provided.**
- 8. Provide details of where the construction equipment will be staged. **Not shown.**
- 9. Provide landscape disposition plan.
- 10. Clarify if there will be any pavement markings designating the EV spaces
- 11. Provide a letter of future compliance with the following: Operators of electric vehicle charging stations must apply for a local business tax receipt or use permits in compliance with Chapter 115 of the City Code of Ordinances. All equipment components, including but not limited to functioning, shall be maintained at all times..

 (j) Current contact information, including but not limited to a telephone number for a representative or department of the operator of the charging station shall be posted on each station as contact to report all issues relating to the particular station. Provide how these chargers will be maintained.
- 12. Resubmittal must include an itemized response to all comments made by DRC members. In your resubmittal you must restate the comment, give an explanation of what you have done to alleviate the comment and show where the comment was addressed on the plans (page number and the details which may help staff identify revisions quickly). The DRC will not review your resubmittal if you fail to provide this response.
- 13. Please contact me prior to resubmittal 954-392-2100.

CITY OF PEMBROKE PINES PUBLIC SERVICES DEPARTMENT ENVIRONMENTAL SERVICES/ENGINEERING DIVISION

DRC REVIEW FORM



June 10, 2021

Project: TESLA CHARGING STATION at WAWA City Reference Number: SP 2021-08 & PRJ 2021-10

To: Cole Williams, Planner and Zoning Technician Planning and Economic Development Department

From: John L. England, P.E. Assistant City Engineer Environmental Services/Engineering Division, Public Services Department (954) 518-9040

COMMENTS/RECOMMENDATIONS:

- 1. Site Plan, Sheet C-2 Provide in the Site Plan or in a Pavement Marking and Signage Plan reflecting the appropriate pavement markings for the parking lot areas where proposed asphalt pavement is to match existing. Standard Parking Space markings must be corrected/refurbished to conform the attached City Standard R-41, 'Standard Parking Space Details', Sheet 1 of 3.
- 2. Site Plan, Sheet C-2 Construction of the proposed asphalt pavement to match existing pavement must follow City Standard R-47. Provide a 'Pavement Restoration Detail' and reflect City Standard R-47, 'Asphalt Pavement Repair' on the 'Civil Details' sheet.
- 3. Electrical Equipment Plan, Sheet E-1 Depict the entire length of the proposed directional bore from the proposed utility transformer to the point of connection with the electrical utility line. **Note** that a profile plan with grid elevations depicting the entire length of the directional bore and surrounding underground utilities must be provided in the Construction Permit for approval.
- 4. General Comment **NOTE** that an Engineering Construction Permit is required for installation of the required pavement markings and signage related improvements. Submittal of appropriate signed and sealed plans and Plans Review Fee will be required, as a minimum, by the Environmental Services/Engineering

Division for acceptance of the proposed project for initiation of the plans review for Construction Permit.

NOTE: All resubmittals must include 'Responses' to all 'Comments' in letter format.

MEMORANDUM

June 9, 2021

To: Cole Williams

Planning/Zoning Technician

From: Dean A. Piper

Zoning Administrator

Re: SP 2021-08 (PRJ 2021-10 – Tesla Charging Station @ Wawa)

The following are my comments regarding the above Site Plan:

- 1. Provide color elevations, with dimension, color names, color numbers, etc. of all equipment/cabinets being installed on site.
- 2. Provide landscape plan showing any changes/removal of landscaping.
- 3. Provide landscape buffer around any added equipment.
- 4. Show location of relocated light pole.
- 5. Provide overall site plan with identifying EV spaces and updating all parking data with this information.
 - Note: Per code, these spaces must be in excess of Wawa required parking.
- 6. Will there be a staging area during construction/installation? If so, show location on site plan and provide all details of any fencing, signs, etc.
- 7. Contact Sherrell Jones-Ruff in Building @ (954) 628-3725, or by email @ sjones-ruff@cgasolutions.com, to set up pre-app meeting with Building.

Please contact me with any questions.

MEMORANDUM

June 8, 2021

To: Cole Williams

Planner

From: Christian Zamora

Planner / Zoning Specialist

Re: (SP 2021-08) Tesla Charging Station – Wawa at Villages of Mayfair Outparcel

The City of Pembroke Pines Planning Division has conducted a landscape review for Tesla Charging Station – Wawa @ Villages of Mayfair Outparcel. The following items need to be addressed prior to this project being found in compliance:

- 1. Per plans, re-locating existing material. Need to provide plating replacement detail for tree / shrub being relocated. As per City of Pembroke Pines Landscape Ordinance 155.661 (E) "Utility structures, garbage, and refuse areas shall be screened with landscaping material to the extent that these areas are not visible at a maximum height of six feet from abutting properties or adjacent right-of-ways."
- 2. Irrigation must be working properly to ensure that all new and existing landscape material is adequately being irrigated. A "wet-check" shall be done at time of final inspection to ensure all irrigation heads are working properly etc.

It is also required that projects utilize best management practices set by Florida Friendly Landscape Standards and meet material Design and Installation Standards. City Code 155.664

Please contact me with any questions.

CHRISTIAN ZAMORA

Planner/ Zoning Specialist, Planning and Economic Development Department City of Pembroke Pines
601City Center Way
Pembroke Pines, FL 33025
954.392.2100 (Office) · czamora@ppines.com
Consider the environment before printing this email.

DRC REVIEW FORM

PEMBROKE PINES FIRE RESCUE FIRE PREVENTION BUREAU

FIRE PLANS EXAMINER BY:

Brian Nettina Assistant Fire Marshal

(954) 499-9557 bnettina@ppines.com

PROJECT NAME:

Tesla Charging Station

REFERENCE #:

SP 2021 - 08

DATE REVIEWED:

06/03/2021

CONFORMS TO THE CITY OF PEMBROKE PINES FIRE DEPARTMENT STANDARDS

YOU HAVE SATISFIED THE FIRE DEPARTMENT'S CONCERNS REGARDING THE SITE PLAN REVIEW

SUBJECT SITE AERIAL PHOTO

Tesla Charging Station (SP 2021-08, PRJ 2021-10)



City of Pembroke Pines Received

AUG 23 2021

Planning & Economic Development

TESLA

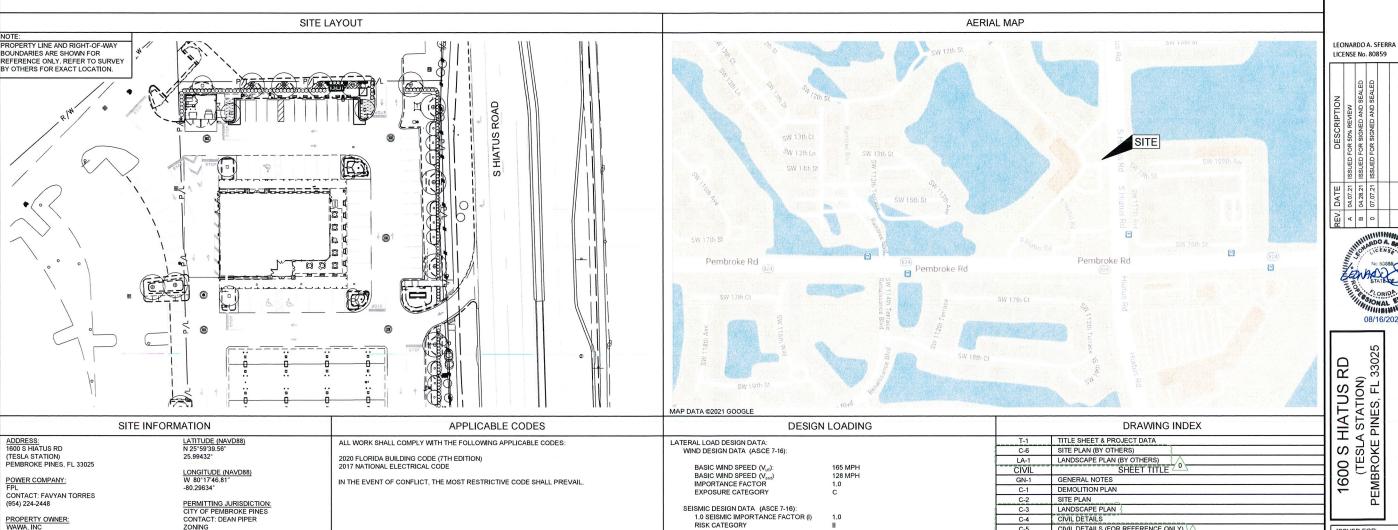
CHARGING STATION

1600 S HIATUS RD (TESLA STATION) PEMBROKE PINES, FL 33025





TESLAT



SITE CLASS (ASSUMED)
MAPPED SPECTRAL RESPONSE

SEISMIC DESIGN CATEGORY

SHORT PERIODS (Ss) 1 SEC. PERIODS (S₁) SPECTRAL RESPONSE COEFF.

SHORT PERIODS (Sps)

0.022

0.049

RD 1600 S HIATUS RI (TESLA STATION) PEMBROKE PINES, FL 33

CIVIL DETAILS (FOR REFERENCE ONLY)

ELECTRICAL GENERAL NOTES

ELECTRICAL SITE PLAN ONE-LINE DIAGRAM & PANEL SCHEDUL

ELECTRICAL DETAILS

REFERENCED DOCUMENTS

SUPERCHARGER DATASHEET

UTILITY DESIGN DOCUMENTS ELECTRICAL EQUIPMENT CUTSHEETS

TOPOGRAPHIC SURVEY

SUPERCHARGER POST INSTALLATION MANUA

SHEET & ECT DATA TITLE S PROJE(

ISSUED FOR:	
PERMIT	XXX
BID	xxx
CONSTRUCTION	xxx
RECORD	XXX
INSTALL MANAGER	DESIGNER

2020141.73

T-1

3500 DEER CREEK ROAD PALO ALTO, CA 94304 (650) 681-5000

CONTACT: VINCENT CIPOLLONE (610) 306-5462

EQUIPMENT SUPPLIER: TESLA, INC.

GPD GROUP, INC. LIC. # - 30920 CONTACTS:

ZSHEETS@GPDGROUP.COM PROJECT COORDINATOR:
TROY EVESLAGE, PE - IN# PE11500164

(317) 295-3179 TEVESLAGE@GPDGROUP.COM

PERMIT COORDINATOR: SARAH HONEYCUTT (330) 572-3508 SHONEYCUTT@GPDGROUP.COM

CONTACT: DEAN PIPER ZONING DPIPER@PPINES.COM (954) 392-2110

FLOOD HAZARD AREA NOTE

OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER

THE SITE IS LOCATED IN FLOOD ZONE "X" (AREA DETERMINED TO BE

FLOOD INSURANCE MAP NUMBER 12011C0710H

EFFECTIVE DATE - 08/18/2014.

COUNTY: BROWARD

(330) 572-3643

PROJECT DESCRIPTION INSTALL (2) V3 SUPERCHARGER CABINETS

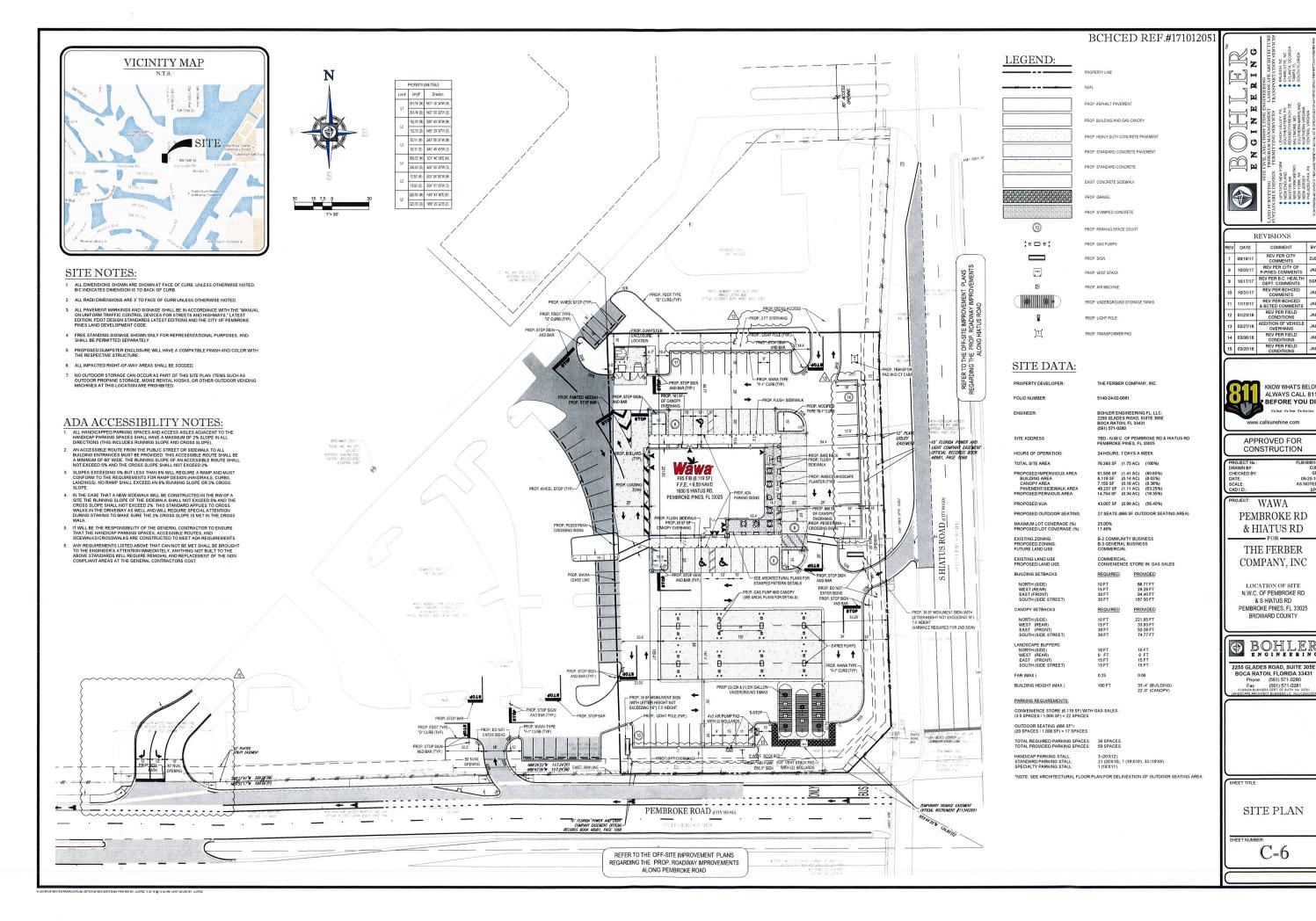
UTILITY COORDINATOR
JADEN BEACHY JBEACHY@GPDGROUP.COM

INSTALL (8) V3 CHARGING POSTS
INSTALL (1) MASTER CONTROLLER INTEGRATED IN SWITCHGEAR
INSTALL (1) SWITCHGEAR ASSEMBLY

INSTALL (1) UTILITY TRANSFORMER

BEFORE SCALING & PLAN REPRODUCTION WARNING

CONTRACTORS SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND FIELD CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTICY THE TESLAIN WRITING OF ANY DISCREPANCIES. BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.



LANDSCAPE MINIMUM REQUIREMENTS:

For non-residential properties the planting requirement shall be calcula (a) One tree every 5,000 square feet of gross area.

(b) Ten shrubs every 5,000 square feet of gross area

<u>76,260</u> SF gross area / 5,000 SF = <u>15</u> trees & <u>152</u> shrubs require: <u>18</u> trees & <u>514</u> shrubs provide

Palms at a 3:1 ratio minimum ten feet in height, ten feet in spread, planted in close proximity to each other shall be considered as

All trees shall be planned to ensure that there is adequate root and canopy spac-paved surface or a form of infrastructure (determined to have an invasive root sy system.

All common areas shall be fully landscaped and irrigated. Common areas require require no more than 50% soci.

Trees in excess of five shall have no more than 20% of a single species.

All properties three shories and below minimum:

(a) 20% of required trees meet 14-16" H with 3" diameter at breast height.

(b) 20% of required trees meet 12-14' H with 2" diameter at breast height (c) 60% of required trees required meet § 153.03(J).

Landscaping Adjacent to R-O-W:

Landscaping Adjacent to abutting properties : Minimum 10' wide landscape strip with one tree per 50 LF

 East Propretty Line
 183 LF
 50 LF
 =
 4 trees required

 4 trees provided
 4 trees provided

Interior parking and paved area Landscaping:
Parking and paved areas shall comply with the following min

(a) Every five parking spaces; and (b) Every 100 square feet of interior landscaping;

 $\underline{64}$ spaces / 5 = $\underline{13}$ trees required $\underline{13}$ trees provided

Total required trees:

Total native species:

Total required native trees (50%) = 17
Total provided native trees (60%) = 20

Total required native shrubs/ groundcovers (50%) = <u>721</u>
Total provided native shrubs/ groundcovers (72%) = <u>1,026</u>

LANDSCAPE PLANT MATERIALS

OTY TREES/ PALM	SYMBOL IS	BOTANICAL/ COMMON NAME	TOLERANT	NATIVE	SPECIFICATIONS
8	CS	CORDIA SEBESTENA/ ORANGE GEIGER	YES	YES	45 GAL., 2* CALIPER, 10'- 12' HT, X 4'- 5' SPD., 4' C.T. HT.
3	IC	ILEX CASSINE TENSAW/ DAHOON HOLLY	YES	YES	FIELDGROWN, 2.5" CALIPER, 10"-12" HT, X 5" SPD., FULL TO GROUND
14	QV	QUERCUS VIRGINIANA/ 'SKY CLIMBER' LIVE OAK	YES	YES	100 GAL., 4" CALIPER, 15' - 16' HT, X 6' SPD, MIN.
14	PR	PLUMERIA RUBRA/ WHITE PLUMERIA	YES	NO	45 GAL., 2* CALIPER, 10'- 12' HT, X 4'- 5' SPD., 4' C.T. HT.
6	SP	SABAL PALMETTO/ SABAL PALM	YES	YES	FIELDGROWN, 12' - 18' CLEAR TRUNK, SEE PLAN FOR C.T. HTS
12	TR	THRINAX RADIATA/ FLORIDA THACTH PALM	YES	YES	FIELDGROWN, 10'-14' OVERALL HT., SEE PLAN FOR HTS

SHRUBS! GR	ROUNDCOVERS				
290	BF	BULBINE FLAVASCENS/ YELLOW BULBINE	YES	NO	1 GAL., MIN. 14" HT., FULL, 18" O.C.
251	CI	CHRYSOBALANUS ICACO/ RED-TIP COCOPLUM	YES	YES	7 GAL, MIN, 36" HT., FULL, 36" O.C.
43	DT	DIANELLA TASMANICA/ BLUEBERRY FLAX LILY	YES	NO	1 GAL., MIN, 14" HT., FULL, 30" O.C.
257	FM	FICUS MICROCARPA/ GREEN ISLAND FICUS	YES	YES	3 GAL., MIN. 14" HT., FULL, 30" O.C.
69	GG	GALPHIMIA GRACILIS/THRYALLIS	YES	YES	7 GAL, MIN, 36" HT., FULL, 36" O.C.
45	JP	JUNIPERUS CONFERTA/ BLUE PACIFIC JUNIPER	YES	NO	3 GAL, MIN, 9" HT, X 15" SPD, FULL, 30" O.C.
38	LC	LOROPETALUM CHINENSIS/ DWARF RUBY LOROPETALUM	NO	NO	7 GAL, MIN, 30" HT, X 24" SPD., FULL, 30" O.C.
45	MC	MUHLENBERGIA CAPILLARIS/ MUHLY GRASS	YES	YES	3 GAL., MIN. 24" HT., FULL. 36" O.C
45	SB	SPARTINA BAKERI/ SAND CORDGRASS	YES	YES	3 GAL., MIN. 24" HT., FULL, 36" O.C
25	SR	SERENOA REPENS / DWARF SAW PALMETTO	YES	YES	3 GAL., MIN. 24" HT., FULL. 36" O.C
350	MS	MIMOSA STRIGILLOSA/ SUNSHINE MIMOSA	YES	YES	1 GAL., FULL, 18" O.C.
168	ZP	ZAMIA PUMILA: COONTIE FERN	YES	YES	3 GAL., MIN, 15" SPD., FULL, 30" O.C.
ANNUALS/ P	EDDENIAL C				
ANNUALS/ P	ERRENIALS	SEASONAL VARIETIES- SEE PLANTER LAYOUTS A. B. C. & D.			1 GAL. FULL SPACING AS SHOWN
		THIS SHEET			1002,1022,0110110110
SOD/ MULCH	1				
S.F.	SOD	PASPALUM NOTATUM/ ARGENTINE BAHIA GRASS			S.F. DETERMINED BY CONTRACTOR- SEE PLAN FOR LOCATION
S.F.	SOD	ZOYSIA JAPONICA 'EMPIRE' / EMPIRE ZOYSIA GRASS			S.F. DETERMINED BY CONTRACTOR- SEE PLAN FOR LOCATIONS
CY.	MULCH	DOUBLE- GROUND MELALEUCA MULCH; COCOA BROWN COLOR			3" THICK IN ALL PLANTING AREAS
CY.	ROCK	$1\frac{1}{2}$ - 3° DIA., BROWN RIVER ROCK WITH COMMERCIAL GRADE WEED CLOTH AND PREMALOC EDGING; MILL FINISH, INSTALL PER SPECS.			SEE PLAN FOR LOCATIONS
LF.	PANELS	ROOT BARRIER PANELS BY CENTURY PRODUCTS, INC. Model # CP36-2			INSTALL PER MANUFACTURER'S SPECIFICATIONS- SEE PLAN FOR LOCATIONS.

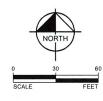
LANDSCAPE GENERAL NOTES:

- 1. All installed plant material shall be a minimum grade of Florida #1 or better as identified in Grades and Standards by the
- erida Department of Agriculture, where applicable.

 All landscape areas excavated shall be filled with 50% muck soil mix.
- All plant installations shall conform to all applicable regulations in regards to planting distances away from above ground utility uctures and lines and shall not be installed underneath roofs, overhangs, and balconies unless their mature height does not encreach
- All plant material shall not impede line of sight as stated in § 153.10.
- 4. All plant material shall not impede line of sight as stated in § 15.3.10.
 5. For proper plant material health, all indiscaped areas shall have a readily available water supply or an appropriate and functional irrigation system. Refer to irrigation requirements in § 153.05.
 6. It shall be the duty of a properly owner that all plant material and non-living dutable landscaping material shall be installed and perpetually maintained in a manner as determined by qualified city staff to be generally consistent with proper horticultural practices.
 7. All installed plant material shall be a minimum grade of Florida #1 or better as identified in Grades and Standards by the Florida Department of Agriculture, where applicable
 8. All landscape areas excavated shall be filled with 50% muck soil mix.
 9. All plant installations shall conform to all applicable regulations in regards to planting distances away from above ground utility structures and lines and shall not be installed underneath roofs, overhangs, and balconies unless their mature height does not encreact upon the structures.

- structures and lines and shall not be installed underneath foots, overhangs upon the structure. 10. All plant material shall not impede line of sight as stated in § 153.10. 11. For proper plant material health, all landscaped areas shall have a readily available water supply or an appropriate and functional irrigation system. Refer to irrigation requirements in § 153.05.







PLANTER SPECIFICATIONS

24" X 24": ALLIED MOLDED PRODUCTS LLC - BOULEVARD #1SEP-2425. Color: Benjamin Moor #0C-1 Natural Wicker 24" X 48". ALLIED MOLDED PRODUCTS LLC - BOULEVARD #1RECLP-482424. Color: Benjamin Moor #0C-1 Natural Wicke







GR	BW	GR
ESIGNED BY	RAWN BY	нескер ву

PLAN LANDSCAPE

Wawa ERD. & SHIATUS F

PEMBROKE

DATE 02/28/18 PROJECT NO.

SHEET NUMBER LA-1

ALWAYS CALL 811
BEFORE YOU DIG

GENERAL CONSTRUCTION NOTES

- ALL WORK SHALL COMPLY WITH ALL STATE AND LOCAL CODES AND ANY OTHER REGULATING AUTHORITIES WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK. 27.
- PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND NOTIFY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE FROM TESLA OF ANY DISCREPANCIES, ANY WORK PERFORMED IN CONFLICT WITH THE CONTRACT 28.
- SUBCONTRACTOR INITIATED CHANGES SHALL BE SUBMITTED IN WRITING TO TESLA FOR APPROVAL BEFORE MAKING ANY CHANGES, DEVIATION FROM PLANS BEFORE WRITTEN APPROVAL FROM TESLA PLACES LIABILITY ON THE SUBCONTRACTOR
- ALL EQUIPMENT SHALL BE MOUNTED AS SHOWN. WHERE DETAILS ARE NOT PROVIDED, CONTRACTOR SHALL USE BEST CONSTRUCTION PRACTICES.
- ALL SURFACES SHALL BE PATCHED AND PAINTED AROUND NEW DEVICES AND EQUIPMEN
- ANY METAL SHAVINGS FROM SITE WORK SHALL BE CLEANED FROM ALL SURFACES WHERE OXIDIZED OR CONDUCTIVE METAL SHAVINGS MAY CAUSE RUST, ELECTRICAL SHORT CIRCUITS, OR OTHER DAMAGE.
- APPROVALS FROM BUILDING INSPECTORS SHALL NOT CONSTITUTE AUTHORITY TO DEVIATE
- NEW PAVEMENT INSTALLED AS PART OF THIS PROJECT SHALL MATCH EXISTING PAVEMENT SECTION, ASPHALT AND GAB DEPTHS SHALL BE MAINTAINED
- THE LOCATIONS OF UNDERGROUND FACILITIES SHOWN ON THE PLANS ARE BASED ON EXISTING FILES PROVIDED BY WAWA, INC. IT SHALL BE THE CONTRACTOR'S FULL RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES TO LOCATE THEIR FACILITIES PRIOR TO STARTING CONSTRUCTION, NO ADDITIONAL COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR DAMAGE AND REPAIR TO THESE FACILITIES CAUSED BY
- ALL DIMENSIONS, GRADES, AND UTILITY LOCATIONS SHOWN ON THESE PLANS WERE BASED ON EXISTING FILES PROVIDED BY WAWA, INC. THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION, CONTRACTOR SHALL NOTIFY CONSTRUCTION/PROJECT MANAGER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING MTH CONSTRUCTION FOR NECESSARY CHANGES, NO EXTRA COMPENSATION SHALL BE 1 PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO INFORMATION SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- THE GENERAL CONTRACTOR SHALL VISIT THE SITE AND SHALL FAMILIARIZE THEMSELVES WITH ALL CONDITIONS AFFECTING THE PROPOSED WORK, ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE TESLA PRIOR TO THE COMMENCEMENT OF WORK
- ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND FEDERAL, STATE AND LOCAL JURISDICTION CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, 3. CONTRACTOR SHALL COMPACT SUBGRADE. SEE FROST/NO FROST DESIGN NOTES BELOW. EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS
- PLANS ARE NOT TO BE SCALED. THESE PLANS ARE INTENDED TO BE A DIAGRAMMATIC OUTLINE ONLY UNLESS OTHERWISE NOTED. DIMENSIONS SHOWN ARE TO FINISH 5. SURFACES UNLESS OTHERWISE NOTED. SPACING BETWEEN EQUIPMENT IS THE MINIMUM. REQUIRED CLEARANCE, THEREFORE, IT IS CRITICAL TO FIELD VERIFY DIMENSIONS, SHOULD THERE BE ANY QUESTIONS REGARDING THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING A CLARIFICATION FROM TESLA PRIOR TO PROCEEDING WITH THE WORK. DETAILS ARE INTENDED TO SHOW DESIGN INTENT. MODIFICATIONS MAY BE REQUIRED TO SUIT JOB DIMENSIONS OR CONDITIONS AND SUCH 7 MODIFICATIONS SHALL BE INCLUDED AS PART OF WORK AND PREPARED BY TESLA PRIOR
- THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE CONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR 9. APPROVAL BY THE TESLA PRIOR TO PROCEEDING.
- THE GENERAL CONTRACTOR SHALL COORDINATE WORK AND SCHEDULE WORK ACTIVITIES
- CONSTRUCTION SHALL BE DONE IN A WORKMANLIKE MANNER BY COMPETENT EXPERIENCED WORKMAN IN ACCORDANCE WITH APPLICABLE CODES AND THE BEST
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, 1 LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT NTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER
- THE CONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES SHALL BE PROTECTED AT ALL TIMES.
- CONTRACTOR SHALL MINIMIZE DISTURBANCE TO THE EXISTING SITE DURING 3 CONSTRUCTION, EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE FEDERAL AND LOCAL JURISDICTION FOR EROSION
- 23. INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FROM SITE VISITS AND/OR DRAWINGS PROVIDED BY THE SITE OWNER. CONTRACTORS SHALL NOTIFY TESLA OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- FIELD TESTING OF FARTHWORK COMPACTION AND CONCRETE CYLINDERS SHALL BE PERFORMED BY AN INDEPENDENT TESTING LAB. THIS WORK TO BE COORDINATED BY THE 5.

- 25. PROVIDE EROSION CONTROL MEASURES IN ACCORDANCE WITH STATE DOT, LOCAL PERMITTING AGENCY AND EPA REQUIREMENTS.
- PROVIDE AND MAINTAIN ALL TEMPORARY FENCING, BARRICADES, WARNING SIGNALS AND SIMILAR DEVICES NECESSARY TO PROTECT AGAINST THEFT FROM PROPERTY DURING THE ENTIRE PERIOD OF CONSTRUCTION REMOVE ALL SUCH DEVICES UPON COMPLETION OF THE 9
- EXISTING UTILITIES: DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS, EXCEPT WHEN PERMITTED IN WRITING TESLA
- GRANULAR BACKFILL: SHALL MEET THE FOLLOWING GRADATION PER THE TABLE BELOW:

SIEVE SIZE	TOTAL PERCENT PASSING
1 1/2 INCH (37.5 MM)	100
1 INCH (25.0 MM)	75 TO 100
3/4 INCH (19.00 MM)	80 TO 100
3/8 INCH (9.5 MM)	35 TO 75
NO. 4 (4.75 MM)	30 TO 60
NO. 30 (0.600 MM)	7 TO 30
NO. 200 (0.75 MM)	3 TO 15

- GRANULAR BEDDING AND TRENCH BACKFILL: WELL-GRADED SAND MEETING THE GRADATION REQUIREMENTS OF ASTM D2487 (SE OR SW-SM).
- MATERIAL CONTAINING REFUSE, FROZEN LUMPS, DEMOLISHED BITUMINOUS MATERIAL. VEGETATIVE MATTER, WOOD, STONES IN EXCESS OF 3 INCHES IN ANY DIMENSION, AND DEBRIS AS DETERMINED BY THE CONSTRUCTION MANAGER. TYPICAL THESE WILL BE SOILS CLASSIFIED BY ASTM AS PT, MH, CH, OH, ML, AND OL.
- BEFORE STARTING GENERAL SITE PREPARATION ACTIVITIES. INSTALL EROSION AND SEDIMENT CONTROL MEASURES PER APPLICABLE PLAN PREPARED BY CONTRACTOR. THE WORK AREA SHALL BE CONSTRUCTED AND MAINTAINED IN SUCH CONDITION THAT IN THE EVENT OF RAIN THE SITE WILL BE DRAINED AT ALL TIMES.
- PERFORM ALL GRADING TO PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES AND SMOOTH, EVEN SURFACE DRAINAGE OF THE ENTIRE AREA WITHIN THE LIMITS OF CONSTRUCTION, GRADING SHALL BE COMPATIBLE WITH ALL SURROUNDING TOPOGRAPHY AND STRUCTURES.

GENERAL FOUNDATION NOTES

- DETERMINATION OF FINAL BEARING ELEVATIONS TOPSOIL AND EXCAVATION STRIPPING DEPTH, INSPECTION OF ALL SUBSOIL EXPOSED DURING STRIPPING EXCAVATION OPERATIONS, APPROVAL OF FILL MATERIALS, DENSITY TESTING OF FILLS TO ENSURE PLACEMENT PER SPECIFICATION REQUIREMENTS, INSPECTION OF FOUNDATION BEARING SURFACES, AND VERIFICATION OF ALLOWABLE BEARING PRESSURES ARE THE TESTING LABORATORY'S RESPONSIBILITY
- ILL FOUNDATIONS ARE TO REST ON FIRM UNDISTURBED SOIL OR COMPACTED FILL FREE FROM ORGANIC MATTER. IF POOR SOIL CONDITIONS ARE ENCOUNTERED AT FOUNDATION DEPTHS SHOWN, NOTIFY OWNER'S REPRESENTATIVE BEFORE PROCEEDING WITH
- FOUNDATIONS HAVE BEEN DESIGNED BASED ON AN ASSUMED ALLOWABLE SOIL BEARING
- NEW FOOTINGS PLACED ADJACENT TO EXISTING FOOTINGS SHALL BEAR AT THE SAME ELEVATION, UNLESS NOTED OTHERWISE.
- STEP FOOTINGS AT A RATIO OF ONE (1) VERTICAL TO TWO (2) HORIZONTAL WITH A MAXIMUM VERTICAL STEP OF 2'-0" UNLESS NOTED OTHERWISE.
- INUNDATION AND LONG TERM EXPOSURE OF BEARING SURFACES, WHICH WILL RESULT IN DETERIORATION OF BEARING FORMATIONS, SHALL BE PREVENTED. FOOTINGS SHALL BE PLACED IMMEDIATELY FOLLOWING FOOTING EXCAVATIONS AND BEARING SURFACE
- UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT THE
- GROUNDWATER ASSUMED TO BE BELOW EXCAVATION DEPTH. IF GROUNDWATER IS ENCOUNTERED DURING EXCAVATION ON SITE, CONTRACTOR SHALL PROVIDE FOR ANY SITE DRAINAGE AND DE-WATERING REQUIRED.
- 10. CONTRACTOR TO VERIFY LOCATION OF ALL EXISTING PUBLIC AND PRIVATE UTILITIES PRIOR TO EXCAVATION, IF NECESSARY, UTILITIES SHALL BE RELOCATED PRIOR TO FOUNDATION

- ALL CONCRETE CONSTRUCTION SHALL CONFORM TO ACI 301-10, "STANDARD SPECIFICATION FOR STRUCTURAL CONCRETE" AND ACI 302, 305 AND 306 UNLESS NOTED OTHERWISE
- ALL DETAILING, FABRICATION AND PLACING OF CONCRETE SHALL CONFORM TO ACI 318-14, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE" AND THE LATEST ACI "MANUAL OF STANDARD PRACTICE FOR DETAIL REINFORCED CONCRETE STRUCTURES" UNLESS NOTED OTHERWISE.
- SAFETY AND PERFORMANCE OF THE STRUCTURE ARE THE RESPONSIBILITY OF THE CONTRACTOR INSOFAR AS THEY ARE AFFECTED BY THE LOCATION AND DETAILS OF CONSTRUCTION JOINTS. SHOP DRAWINGS OF THE PROPOSED CONSTRUCTION JOINT LOCATIONS AND DETAILS ARE TO BE SUBMITTED TO THE ARCHITECT FOR APPROVAL
- SIZE OF AGGREGATE SHALL NOT EXCEED SIZE SUITABLE FOR INSTALLATION METHOD UTILIZED OR 1/3 CLEAR DISTANCE BEHIND OR BETWEEN REINFORCING, MAXIMUM SIZE MAY BE INCREASED TO 2/3 CLEAR DISTANCE PROVIDED WORKABILITY AND METHODS OF SOLIDATION SUCH AS VIBRATING WILL PREVENT HONEYCOMBS OR VOID
- ALL CONCRETE UNLESS NOTED OTHERWISE SHALL DEVELOP A MINIMUM COMPRESSIVE STRENGTH IN 28 DAYS AS FOLLOWS: ALL CONCRETE - 2500 PSI, ALL CONCRETE EXPOSED TO WEATHER SHALL CONTAIN 6% $(\pm\ 1\%)$ AIR ENTRAINMENT.
- 6. REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60.

- WELDED WIRE FABRIC REINFORCING SHALL CONFORM TO ASTM A1064 AND BE FURNISHED IN FLAT SHEETS AND INSTALLED ON CHAIRS OR PRECAST CONCRETE BLOCKS.
- NO TACK WELDING OF REINFORCING IN THE FIELD IS PERMITTED
- PROVIDE CORNER BARS AT ALL LOCATIONS WHERE REINFORCEMENT CHANGES DIRECTION
- 10. PROVIDE STRAIGHT AND DIAGONAL BARS AT EDGES OF ALL OPENINGS
- 11. REINFORCING EMBEDMENT AND LAP SPLICES (INCHES) FOR 2500 PSI CONCRETE

		01	HER	TO)P•
	BAR SIZE	ANCHORAGE	SPLICE	ANCHORAGE	SPLICE
#	3	15	19	19	24
#	4	19	25	25	33
#	5	24	31	31	41
#	6	29	37	37	49
*	HORIZONTA	AL BARS WITH MOR	RE THAN 12" O	F CONCRETE BELOW	V BAR

12 NON-SHRINK GROUT SHALL MEET A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 6000 PSI

CHARGING CABINET PRE-FABRICATED ASSEMBLY FOUNDATION & ALL CHARGING POST FOUNDATIONS -FROST DESIGN NOTES (BOTTOM OF FOUNDATION ABOVE FROST LEVEL):

- CONCRETE FOUNDATIONS SHOULD BEAR DIRECTLY ON A PROPERLY COMPACTED FREE-DRAINING GRANULAR FILL CONSISTING OF NO. 57 STONE OR AN APPROVED
- GRANULAR FILL SHOULD EXTEND VERTICALLY TO THE MINIMUM RECOMMENDED REGIONAL FROST DEPTH AND LATERALLY 2/3D FROM THE FOUNDATION PERIMETER (EXCLUDING SIDE OF PERIMETER ADJACENT TO CURB), GRANULAR FILL SHOULD BE PLACED IN 8 INCH LOOSE LIFTS AND COMPACTED WITH A VIBRATORY COMPACTOR. THE COMPACTION EQUIPMENT SHOULD BE OPERATED OVER THE FULL WIDTH OF THE FOUNDATION UNDERCUT AREA UNTIL VISIBLE DEFORMATION OF THE BACKFILL CEASES, SEE SHEET T-1 FOR LOCAL FROST DEPTH.
- GEOTEXTILE (FILTER FABRIC) SHOULD BE PLACED BETWEEN THE GRANULAR BACKFILL AND COHESIVE SOILS TO PRECLUDE THE INFILTRATION OF FINES.

CHARGING CABINET PRE-FABRICATED ASSEMBLY FOUNDATION & ALL CHARGING POST FOUNDATIONS - NO FROST DESIGN NOTES (BOTTOM OF FOUNDATION BELOW FROST LEVEL)

- CONCRETE FOUNDATIONS SHOULD BE SUPPORTED ON A 6 INCH COMPACTED LAYER OF APPROVED FREE-DRAINING GRANULAR MATERIAL.
- APPROVED MATERIAL SHOULD BE COMPACTED OVER THE FULL WIDTH OF THE INFILL AREA UNTIL VISIBLE DEFORMATION OF THE BACKFILL CEASES.

STRUCTURAL STEEL

ASTM A36 UNO PLATE: ASTM A53, TYPE E OR S, GRADE B (Fy = 35 KSI) ASTM A1085 GRADE A (Fy = 50 KSI)

- DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO THE 2010 AISC (360-10)
- ALL WELDING SHALL BE DONE USING E-70XX ELECTRODES IN ACCORDANCE WITH AWS D1.1
- 3. FIELD VERIFY ALL CONDITIONS AT AND CONNECTIONS TO THE EXISTING CONSTRUCTION ALL EXPOSED STRUCTURAL STEEL, ANCHOR RODS AND BOLTS SHALL BE HOT DIP GALVANIZED
- PER ASTM A123. UNLESS NOTED OTHERWISE ON THE DRAWING, ALL ANCHOR RODS SHALL CONFORM TO ASTM F1554 $\rm Gr$ 55 WITH HEAVY HEXAGONAL NUT.
- SUBMIT FABRICATION AND ERECTION DRAWINGS SHOWING ALL DETAILS, CONNECTIONS MATERIAL DESIGNATIONS, AND TOP STEEL ELEVATIONS FOR APPROVAL. THE SHOP DRAWINGS WILL BE REVIEWED FOR GENERAL CONFORMANCE TO THE CONTRACT DRAWINGS. SUCH APPROVAL SHALL NOT RELIEVE THE FABRICATOR/CONTRACTOR OF THE RESPONSIBILITY FOR EITHER THE ACCURACY OF THE DETAILED DIMENSIONS IN THE SHOP AND ERECTION DRAWINGS OR THE GENERAL FIT-UP OF PARTS THAT ARE TO BE ASSEMBLED IN THE FIELD.

TRAFFIC CONTROL NOTES

- DURING THE CONSTRUCTION PERIOD; SIDEWALKS, SHOULDERS, TRAVEL LANE(S), OR STREETS MAY HAVE TO BE TEMPORARILY CLOSED OR RESTRICTED FOR THE UNLOADING / LOADING OF EQUIPMENT OR AS A RESULT OF CONSTRUCTION ACTIVITIES THEMSELVES. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE DIRECTLY WITH THE LOCAL GOVERNING AUTHORITIES ON ANY SUCH CLOSURES AND MUST OBTAIN WRITTEN PERMISSION FROM THE APPROPRIATE AUTHORITIES PRIOR TO IMPLEMENTING SUCH CLOSURES OR RESTRICTIONS. ANY CLOSURE OR RESTRICTION MUST COMPLY WITH THE STATE MANUAL OF NEISTRICTIONS, AND CLOSURES (MUTCD) FOR STREETS AND HIGHWAYS (LATEST EDITION AND REVISION), AND WITH ANY AND ALL ADDITIONAL APPLICABLE CITY, VILLAGE, OR COUNTY REQUIREMENTS. THE CONTRACTOR SHALL PREPARE AND SUBMIT A FORMAL TRAFFIC CONTROL / MOT PLAN TO THE LOCAL GOVERNING AUTHORITIES IF REQUESTED. ALL REQUIRED CONSTRUCTION TRAFFIC MAINTENANCE DEVICES SHALL BE PROVIDED, ERECTED AND MAINTAINED, AND ULTIMATELY REMOVED BY THE CONTRACTOR
- THE CONTRACTOR SHALL MAINTAIN SAFE AND SATISFACTORY ACCESS TO ALL ABUTTING PROPERTIES AND INTERSECTING STREET AT ALL TIMES DURING THE CONSTRUCTION OF THE IMPROVEMENTS ANTICIPATED. DRIVEWAYS MUST BE MAINTAINED AND ALL TRENCHES SHALL BE BACKFILLED AT THE END OF EACH WORK DAY. PER THE STATE MUTCD AND OTHER APPLICABLE APPROPRIATE GOVERNING REQUIREMENTS. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFEGUARDS SLICH AS BARRICADES SATISFACTORY BARRIERS CONES SIGNAGE, BARRELS, MESSAGE BOARDS, LIGHTING, FLAGMEN, LAW ENFORCEMENT OFFICERS, ETC. TO AVOID DAMAGE AND / OR INJURY TO VEHICLES AND PERSONS TRAVERSING THE CONSTRUCTION AREA

SPECIAL INSPECTIONS

THE CONTRACTOR SHALL BE RESPONSIBLE FOR SCHEDULING AND OVERSEEING OF ALL SPECIAL INSPECTIONS REQUIRED BY THE AUTHORITY HAVING JURISDICTION. SPECIAL INSPECTIONS MUST BE COMPLETED PRIOR TO FINAL INSPECTION APPROVAL.

PAVEMENT MARKING NOTES

ALL PAVEMENT MARKINGS TO BE WHITE PAVEMENT PAINT, UNLESS STATED OTHERWISE. ALL PAVEMENT MARKINGS WITHIN ADA AREAS SHALL BE PAINTED BLUE EXCEPT FOR COLORS DEFINED ON THE ADA PAVEMENT SYMBOL.

MARKING (STRIPING) PAINT FOR PARKING SPACES, TRAFFIC ARROWS, ADA PARKING AND SYMBOLS, ETC., PER LOCAL REQUIREMENTS AND AS FOLLOWS

PAVEMENT MARKINGS PAINT SHALL BE WATER BASE FAST DRYING 100% ACRYLIC TYPE: WATER BASE TO MEET FEDERAL SPECIFICATION TTP-01952B, FOR COLD WEATHER APPLICATION PAINT PRODUCT SHALL BE IN ACCORDANCE WITH ASTM-D2369, D1394, D3723, D1475, D562 AND D711.

PROVIDE A NON-SLIP AGGREGATE ADDITIVE TO MARKING PAINT USED AT ADA ACCESS

CONCRETE/WHITE ON ASPHALT EXCEPT WHEN MATCHING ADJACENT OR EXISTING COLOR WHEN THE PAVING IS AN EXPANSION OR SEGMENT OF A LARGER LOT.

EXISTING SLAB REINFORCEMENT INVESTIGATION/X-RAY

1. CONTRACTOR SHALL VERIFY POST TENSIONING AND REINFORCEMENT LOCATION IN EXISTING CONCRETE SLAB PRIOR TO DRILLING

LANDSCAPE/IRRIGATION NOTES

- ALL DISTURBED AREAS THAT ARE NOT TO BE PAVED OR MULCHED SHALL BE GRADED TO
- SOD SHALL BE SELECTED PER PLAN AND MATCHED TO EXISTING SITE. SOD SHALL BE A FIRST GRADE CERTIFIED BLEND CONTAINING NO MORE THAN 30 PERCENT OF OTHER GRASSES AND CLOVERS, AND FREE FROM ALL NOXIOUS WEEDS
- 3. ALL DISTURBED AND PROPOSED LANDSCAPE AREAS SHALL RECEIVE DOUBLE GROUND MELALEUCA MULCH, COCOA BROWN IN COLOR, TO MATCH EXISTING CONDITIONS
- PLANT GUARANTEE: CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM DATE OF PROJECT ACCEPTANCE BY THE OWNER.
- IRRIGATION RELOCATION: CONTRACTOR FIELD VERIFY IF EXISTING IRRIGATION IS PRESENT, DETERMINE POINT OF CONNECTION, SYSTEM PRESSURE, FIXTURE TYPES, AND POTENTIAL FOR EXPANSION IF FOUND THAT THE EXISTING IRRIGATION SYSTEM IS CAPABLE OF FOR EXPANSION, IF FOUND THAT THE EXISTING IRRIGATION SYSTEM IS CAPABLE OF EXPANSION AND REUSE THEN IT SHALL BE MODIFIED TO PROVIDE 100% COVERAGE OF THE LANDSCAPE AREA, IF THE EXISTING IRRIGATION SYSTEM IS NOT CAPABLE OF EXPANSION, CONTRACTOR TO INSTALL A NEW CONTROLLER, BOOSTER PUMP, AND OTHER APPARATUSES NEEDED FOR A COMPLETE IRRIGATION SYSTEM. IRRIGATED AREAS SHALL BE IRRIGATED BY DRIP IRRIGATION OR SIMILAR FIXTURES BY THE SAME SUPPLIER, CONTRACTOR SHALL ENSURE BUILDING WALLS AND WINDOWS WILL NOT BE DAMAGED OR STAINED BY IMPROPER IRRIGATION INSTALLATION OR POOR SELECTION OF FIXTURES. SYSTEM SHALL INCLUDE ALL SPRINKLER FIXTURES, DRIP TUBING, PIPING, VALVES, WIRING AND CONTROLS TO PROVIDE A COMPLETE FUNCTIONAL SYSTEM THAT SHALL COMPLY WITH CITY CODE
- PRIOR TO UPDATING THE IRRIGATION SYSTEM, A CERTIFIED IRRIGATION DESIGNER SHALL PROVIDE SHOP DRAWINGS TO TESLA FOR APPROVAL. UPON APPROVAL OF SHOP DRAWINGS, THE UPDATED IRRIGATION SYSTEM SHALL BE APPROVED BY OWNER FOR FINAL ACCEPTANCE.

5.b. A "WET-CHECK" SHALL BE PERFORMED AT TIME OF FINAL INSPECTION. \(\)

LIGHT/TELEPHONE POLE

TELEPHONE POLE

POWER/LIGHT POLE

FLECTRIC METER

TRANSFORMER

ELECTRIC MANHOLE

ELECTRIC PULLBOX

POWER/LIGHT/TELE POLE

(e)

38

е



	EXISTING	LEGEND		
- R/W C/L WM W IR GAS ST SAN	APPARENT PROPERTY LINE APPARENT RIGHT OF WAY APPARENT CENTERLINE WATER MAIN WATER LINE IRRIGATION LINE	(st) (sa) (m) + sa ** st + + (sa)	CATCH BASIN CURB INLET STORM MANHOLE SANITARY MANHOLE UNKNOWN MANHOLE SANITARY VALVE SEPTIC TANK FIRE HYDRANT WATER METER	HIATUS RD A STATION)
_	ELECTRIC MAIN ELECTRIC LINE LIGHT POLE CONDUIT EXISTING BUILDING	(W) ± (W) (W)	WATER VALVE SPRINKLER HEAD WATER MANHOLE	600 S (TESL
72	LIGHT POLE POWER POLE	(W) (G) (G)	GAS VALVE GAS METER	-
\$ \$\frac{\phi}{\phi}\$\$	POWER/TELEPHONE POLE		GAS MANHOLE GAS SERVICE METER	ISSUED FO

TELEPHONE PEDESTAL

TELEPHONE MANHOLE

CABLE TV PEDESTAL

LUMINESCENT SIGN

BOLLARD

CLEANOU"

YARD LIGHT

FLAG POLE

GAS PUMP

MAIL BOX

tv

0

g pmp

mb

ISSUED FOR:	
PERMIT	XXX
BID	XXX
CONSTRUCTION	XXX
RECORD	xxx
INSTALL MANAGER	DESIGNER
DAVID HERNANDEZ	JJR

08/16/202

A STATION) PINES, FL 3

Z

岁

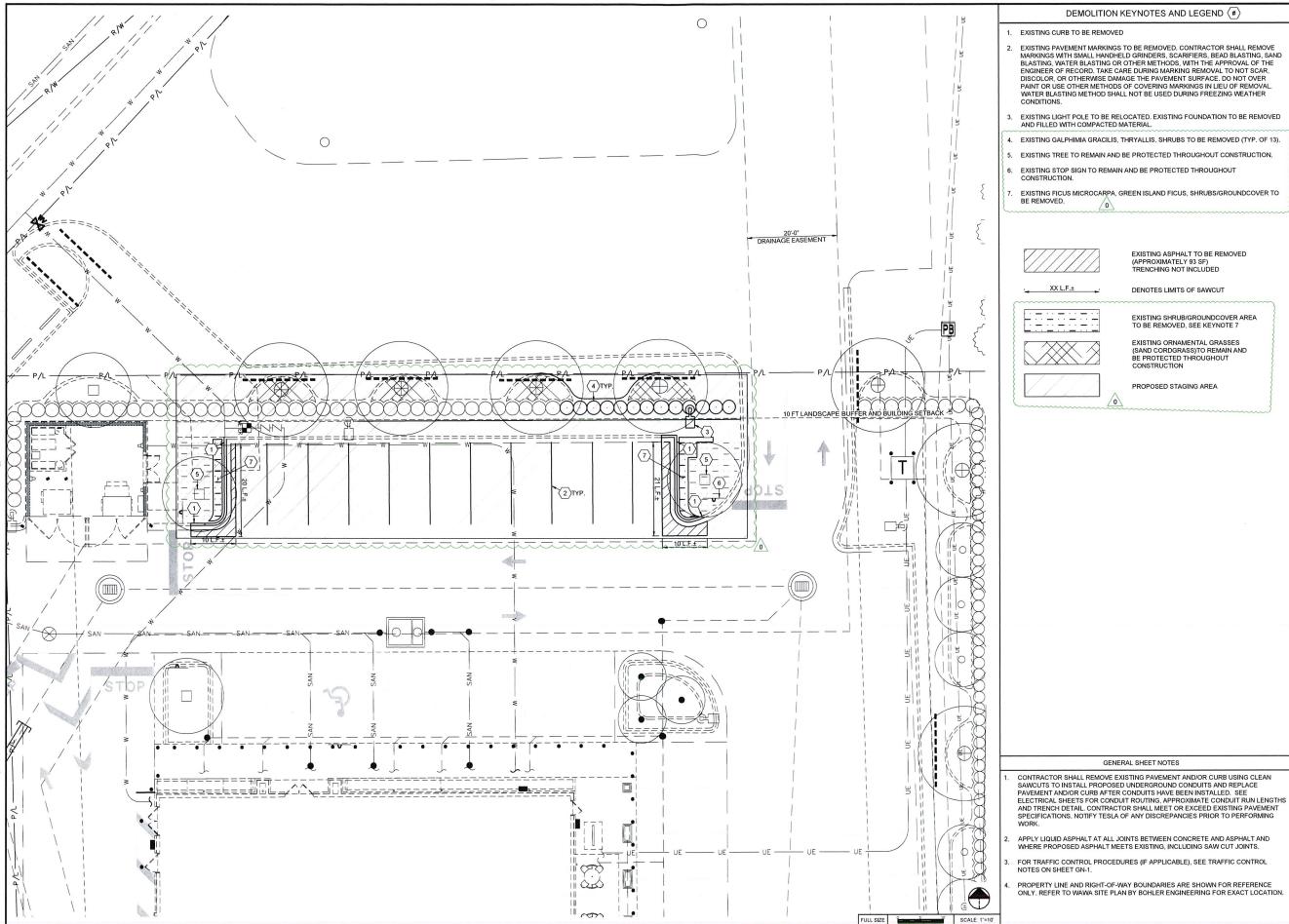
GPD GROUP, INC

TESLA

LEONARDO A. SFERRA

LICENSE No. 80859

330.572.2100 Fax 330.572.210



DEMOLITION KEYNOTES AND LEGEND (#)

EXISTING CURB TO BE REMOVED

 EXISTING PAVEMENT MARKINGS TO BE REMOVED. CONTRACTOR SHALL REMOVE MARKINGS WITH SMALL HANDHELD GRINDERS, SCARIFIERS, BEAD BLASTING, SAND BLASTING, WATER BLASTING OR OTHER METHODS, WITH THE APPROVAL OF THE ENGINEER OF RECORD. TAKE CARE DURING MARKING REMOVAL TO NOT SCAR, DISCOLOR, OR OTHERWISE DAMAGE THE PAVEMENT SURFACE. DO NOT OVER PAINT OR USE OTHER METHODS OF COVERING MARKINGS IN LIEU OF REMOVAL WATER BLASTING METHOD SHALL NOT BE USED DURING FREEZING WEATHER

- 3. EXISTING LIGHT POLE TO BE RELOCATED. EXISTING FOUNDATION TO BE REMOVED AND FILLED WITH COMPACTED MATERIAL.
- 4. EXISTING GALPHIMIA GRACILIS, THRYALLIS, SHRUBS TO BE REMOVED (TYP. OF 13).
- 5. EXISTING TREE TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION.
- 6. EXISTING STOP SIGN TO REMAIN AND BE PROTECTED THROUGHOUT
- EXISTING FICUS MICROCARPA, GREEN ISLAND FICUS, SHRUBS/GROUNDCOVER TO BE REMOVED.

EXISTING ASPHALT TO BE REMOVED (APPROXIMATELY 93 SF) TRENCHING NOT INCLUDED

GENERAL SHEET NOTES

DENOTES LIMITS OF SAWCUT



EXISTING SHRUB/GROUNDCOVER AREA TO BE REMOVED. SEE KEYNOTE 7

EXISTING ORNAMENTAL GRASSES (SAND CORDGRASS) TO REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION

PROPOSED STAGING AREA



520 South Main Street, Suite 2531 Akron, OH 44311 330.572.2100 Fax 330.572.2101



LEONARDO A. SFERRA LICENSE No. 80859

DESCRIPTION	ISSUED FOR 50% REVIEW	ISSUED FOR SIGNED AND SEALED	07.07.21 ISSUED FOR SIGNED AND SEALED			
IV. DAIE	04.07.21	04.28.21	07.07.21			
Š	ď	m				



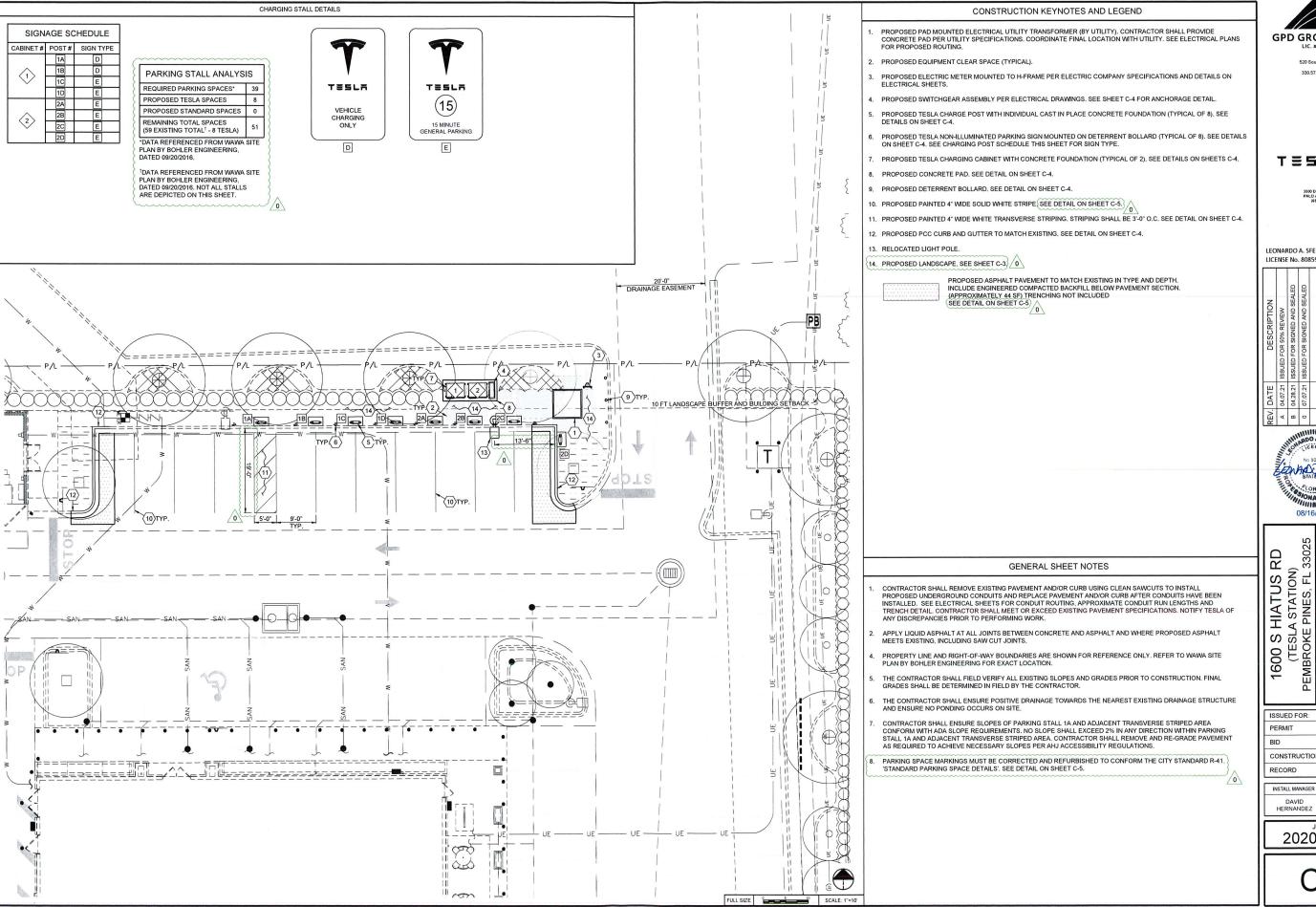
1600 S HIATUS RD (TESLA STATION) PEMBROKE PINES, FL 33025

DEMOLITION

PLAN

ISSUED FOR:	
PERMIT	xxx
BID	xxx
CONSTRUCTION	XXX
RECORD	XXX
INSTALL MANAGER	DESIGNER

JJR



GPD GROUP, INC.

520 South Main Street, Suite 2531 Akron, OH 44311 330.572.2100 Fax 330.572.2101

TESLAT

LEONARDO A. SFERRA LICENSE No. 80859

08/16/2021

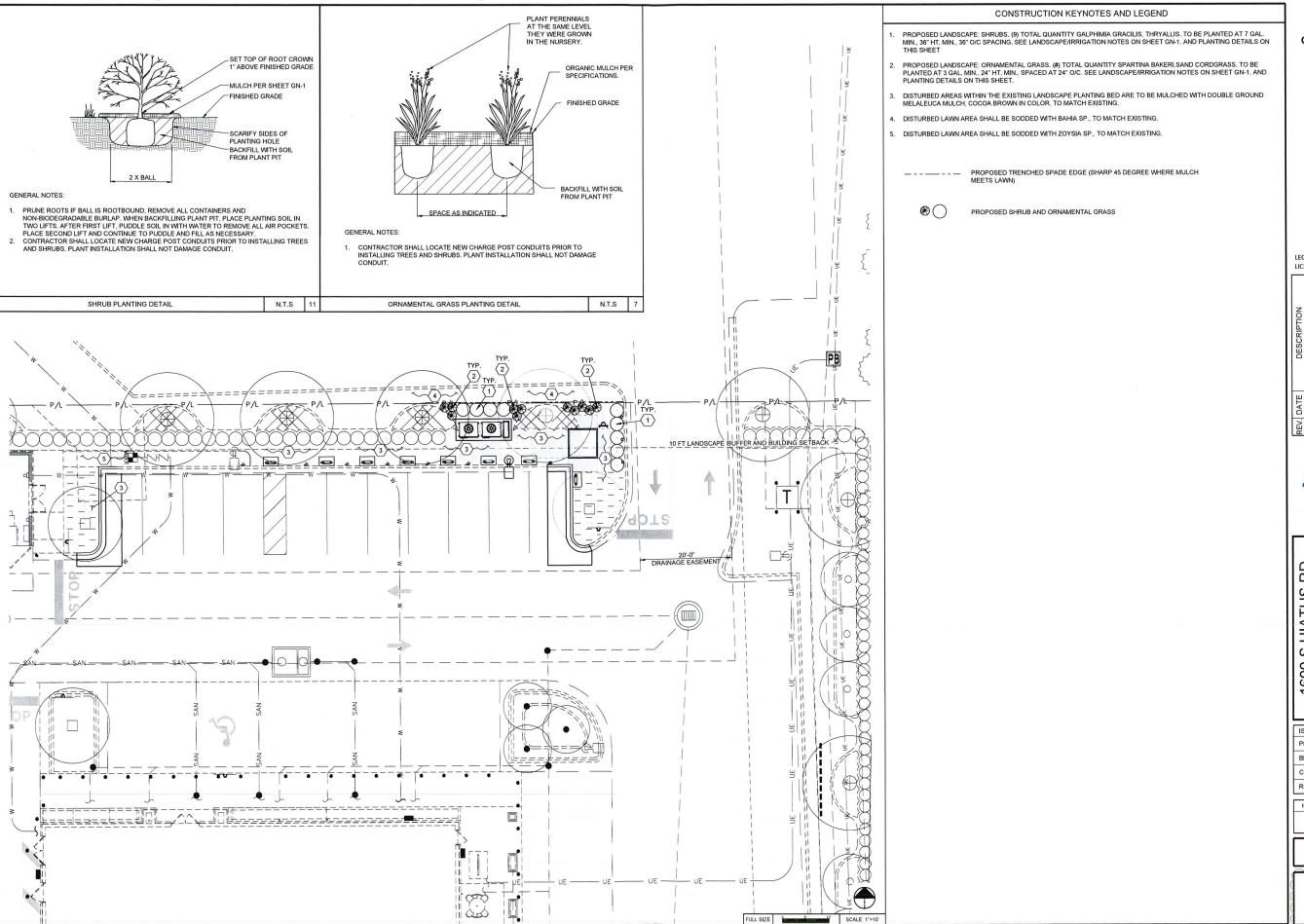
SHIATUS R LA STATION) E PINES, FL 33

SITE

PLAN

SUED FOR:	
RMIT	xxx
D	XXX
ONSTRUCTION	xxx
CORD	XXX
ISTALL MANAGER	DESIGNER

JJR HERNANDEZ



GPD GROUP, INC.

520 South Main Street, Suite 2531 Akron, OH 44311 330.572.2100 Fax 330.572.2101

TESLAT

3500 DEER CREEK RD PALO ALTO, CA 94304 (650) 681-5000

LEONARDO A. SFERRA LICENSE No. 80859

_	_	_	_	_	_		_	_	_
DESCRIPTION	04.07.21 ISSUED FOR 50% REVIEW	ISSUED FOR SIGNED AND SEALED	07.07.21 ISSUED FOR SIGNED AND SEALED						
REV. DATE	04.07.21	04.28.21	07.07.21						
REV.	۷	œ	0						
WINITE STATE OF THE STATE OF TH									



PLAN

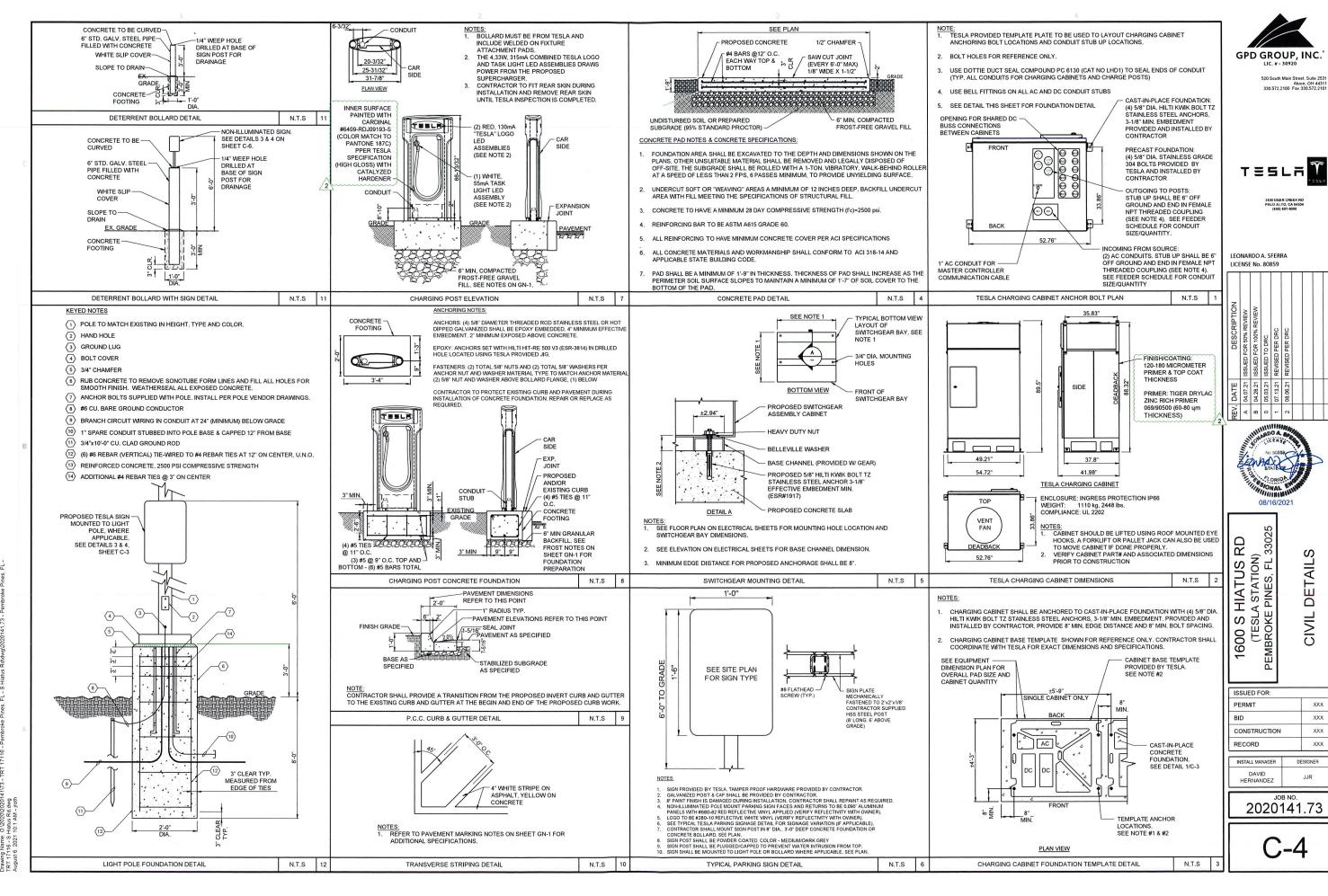
Ш

LANDSCAP

1600 S HIATUS RD (TESLA STATION) PEMBROKE PINES, FL 33025

ISSUED FOR:	
PERMIT	XXX
BID	XXX
CONSTRUCTION	XXX
RECORD	XXX

JJR HERNANDEZ



H

 $\overline{\Box}$

 $\overline{\circ}$

XXX

XXX

XXX

XXX

JJR

NOTES:

- ASPHALT SURFACE COURSE: 1-1/2" TYPE SP-9.5 ASPHALT PLACED IN TWO (2) ¾" LIFTS. A TACK COAT SHALL BE APPLIED BETWEEN LIFTS PER FDOT STANDARDS, IF PLACED IN (2) TWO LIFTS.
- ROCK BASE: 6"(MIN.) 8" (TYP.) LIMEROCK BASE HAVING A MINIMUM LIMEROCK BEARING RATIO (L.B.R.) OF 100 AND MINIMUM CARBONATE CONTENT OF 70% COMPACTED TO 98% MINIMUM OF THE MAXIMUM DRY DENSITY PER A.A.S.H.T.O T-180. AREA OF ASPHALT PAVEMENT REPAIR.
- 3. WHERE EXISTING ROCK BASE HAS NOT BE DISTURBED OR DAMAGE PRIOR TO REMOVAL OF DETERIORATED ASPHALT, ROCK BASE SHALL BE PERMITTED TO BE SCARIFIED AND RE-COMPACTED IN LIEU OF CONSTRUCTION OF NEW LIMEROCK BASE. A PRIME COAT SHALL BE UNIFORMLY APPLIED TO THE SURFACE OF THE FINISHED ROCK BASED UPON RATES PER FDOT STANDARDS.

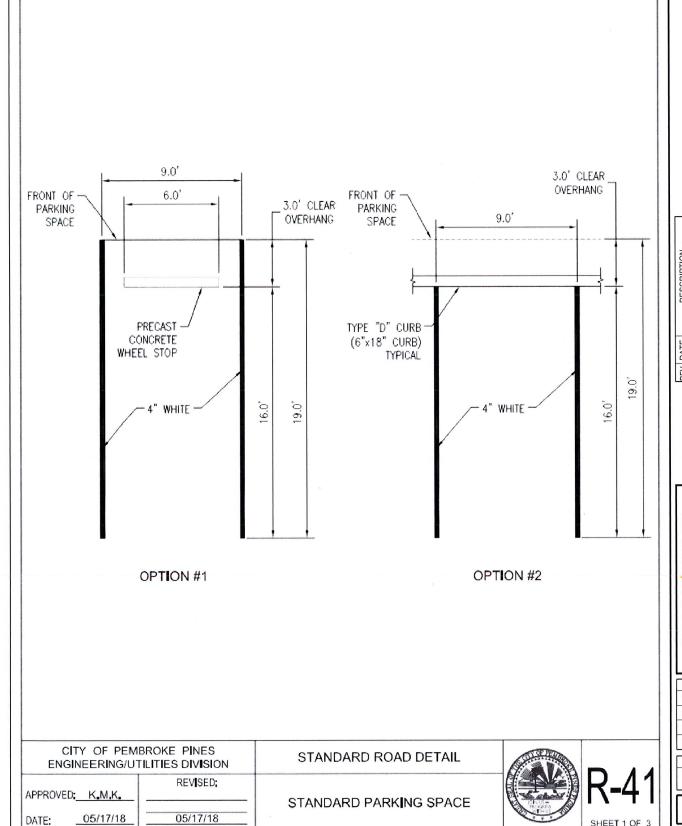
(NOTE: MINIMUM 6" LIMEROCK BASE PERMITTED ONLY WHEN MATCHING EXISTING ROCK BASE THICKNESS.)

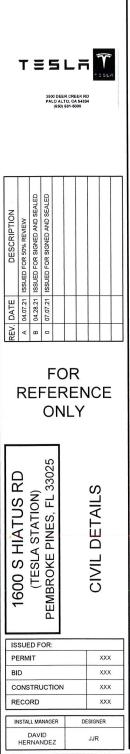
- 4. SUBGRADE: 12" STABILIZED SUBGRADE MATERIAL HAVING A MINIMUM LIMEROCK BEARING RATIO (L.B.R.) OF 40 COMPACTED TO 98% MINIMUM OF THE MAXIMUM DRY DENSITY PER A.A.S.H.T.O T-180.
 EXISTING SUBGRADE SHALL BE RE-COMPACTED AS A MINIMUM FOR ALL REPAIR AREAS. FOR AREAS OF REPAIR WHERE SUBGRADE HAS BEEN DISTURBED BY REMOVAL OF TREE ROOTS, IRRIGATION PIPING WORK, ETC., NEW SUBGRADE SHALL BE CONSTRUCTED.
- MINIMUM ALLOWABLE PAVEMENT REPAIR SHALL BE 2'x2' AS MEASURED FOR THE AREA OF NEW FULL DEPTH LIMEROCK BASE CONSTRUCTION OR 3'x3' FOR AREA OF ROCK BASE SCARIFICATION AND RE-COMPACTION.

ALL MATERIALS AND CONSTRUCTION OF THE PAVEMENT REPAIR STRUCTURE SHALL BE IN ACCORDANCE WITH THE FDOT 'STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION', LATEST EDITION.

CITY OF PEM ENGINEERING/U	BROKE PINES FILITIES DIVISION	STANDARD ROAD DETAIL
APPROVED: K.M.K. DATE: 02/08/21	REVISED:	ASPHALT PAVEMENT REPAIR







2020141.73

Drawing Name, C./ZCZCZCZQ14 1/2 - IRT 17116 - Perborde Prines, FL-5 Hiatus Ro. TRT 17116 - S. Hiatus Ro. Actorig July 13, 2021 3:17 PM - teveslage

- $\frac{\text{IMPORTANT NOTE:}}{\text{WORK BY ELECTRICAL CONTRACTOR''}} \text{REFERENCED IN THESE SPECIFICATIONS SHALL INDICATE WORK BY ELECTRICAL CONTRACTOR OR ANY OF HIS SUBCONTRACTORS UNLESS NOTED}$
- DRAWINGS ARE DIAGRAMMATIC AND INDICATE GENERAL ARRANGEMENT ONLY. COORDINATE INSTALLATION WITH OTHER TRADES TO VERIFY THE ACTUAL SPACE
- ALL SYMBOLS AND ARREVIATIONS USED ON THE DRAWINGS ARE CONSIDERED CONSTRUCTION STANDARDS. IF THE CONTRACTOR HAS QUESTIONS REGARDING THEIR EXACT MEANING, THE ENGINEER SHALL BE NOTIFIED FOR CLARIFICATION BEFORE PROCEEDING WITH THE WORK.
- CONTRACTOR SHALL NOTE SCALE ELECTRICAL DRAWINGS. REFER TO SITE PLANS AND CONSTRUCTION MANAGER ANY SIZES AND LOCATIONS WHEN NEEDED.
- CONTRACTOR'S SCOPE OF WORK SHALL INCLUDE ALL ITEMS DEFINED IN THE CONTRACT DOCUMENTS. THE CONTRACT DOCUMENTS INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING: THE CONTRACT, SPECIFICATIONS, AND CONSTRUCTION DRAWINGS. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIAL, AND EQUIPMENT NECESSARY TO INSTALL ALL ELECTRICAL EQUIPMENT, CONDUIT, WIRING ETC. AS SHOWN OR IMPLIED ON THE DRAWINGS AND TO PROVIDE A COMPLETE OPERATIVE SYSTEM TO THE SATISFACTION OF
- CONTRACTOR SHALL PROVIDE ON-SITE SUPERVISION AT ALL TIMES WHILE THE WORK IS BEING PERFORMED AND SHALL DIRECT ALL WORK, USING HIS BEST SKILL AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, PROCEDURES AND SEQUENCES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- INSTALLATION OF ALL ELECTRICAL EQUIPMENT, DEVICES, CONDUITS, ETC. MUST BE COORDINATED WITH ALL OTHER TRADES. COORDINATE SHUTDOWN TIMES AND WO HOURS WITH BUILDING OWNER, INCLUDING OFF HOURS, WEEKEND, AND HOLIDAY WORK AS
- ANY DISCREPANCIES FOUND WITHIN THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE OWNER IN WRITING PRIOR TO THE AWARD OF THE CONTRACT AND AN ADDENDUM WILL BE ISSUED TO COVER SAME.
- GUARANTEE CONTRACTOR SHALL FURNISH OWNER WITH A WRITTEN GUARANTEE TO PROMPTLY REMEDY ALL DEFECTS OF WORK OR MATERIALS WITHOUT CHARGE FOR A PERIOD OF ONE YEAR AFTER FINAL ACCEPTANCE AND INSPECTION.
- MATERIALS ALL MATERIALS AND FOLIPMENT SHALL BE NEW IN ORIGINAL CONTAINERS/WRAPPINGS, SHALL BE SPECIFICATION GRADE, AND LABELED OR LISTED BY U.L. OR AN ACCREDITED TESTING ORGANIZATION AS REQUIRED BY LOCAL INSPECTORS.
- CONTRACTOR SHALL PROVIDE ADEQUATE AND REQUIRED LIABILITY INSURANCE FOR PROTECTION AGAINST PUBLIC LOSS AND ANY/ALL PROPERTY DAMAGE FOR THE DURATION
- ALL FOUIPMENT SHALL BE DESIGNED TO OPERATE ON VOLTAGE AND PHASE SPECIFIED. ALL EQUIPMENT SHALL BE DESIGNED TO DEPART E ON DELTAGE AND FRASE SPECIFIED.
 CONTRACTOR FURNISHING EQUIPMENT OTHER THAN INDICATED SHALL BE RESPONSIBLE
 FOR ANY CHANGES IN CONDUCTORS, RACEWAYS, SWITCHES, MAIN FEEDERS, AND
 APPURTENANCES AND PAY ALL ASSOCIATED COSTS. REQUIREMENTS FOR ANY INCREASE IN CAPACITIES SHALL BE REVIEWED BY ENGINEER.
- CONTRACTOR SHALL CONFIRM WITH LOCAL LITHITY COMPANY ANY ALL REQUIREMENTS SUCH AS THE: LUG SIZE RESTRICTIONS, CONDUIT ENTRY, SIZE OF TRANSFORMERS, SCHEDULED DOWNTIME FOR THE OWNERS' CONFIRMATION, ETC. ANY/ALL CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE CONSTRUCTION MANAGER. PRIOR TO BEGINNING

LICENSES, CERTIFICATIONS OF INSPECTION

- CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFICATION OF ALL GOVERNING AGENCIES THAT REQUIRE SITE INSPECTION OF THE WORK AND/OR SIMPLY NOTIFICATION. THE CONTRACTOR SHALL OBTAIN AND PAY FOR PERMITS, LICENSES AND INSPECTIONS NECESSARY FOR PERFORMANCE OF THE WORK.
- CONTRACTOR AND ALL OF HIS SUBCONTRACTORS THAT PERFORM ANY WORK ON THIS PROJECT SHALL BE CURRENTLY LICENSED BY ALL AGENCIES WHICH GOVERN OVER THE LAND(S) ON WHICH CONSTRUCTION IS TO TAKE PLACE. CONTRACTOR SHALL SECURE ALL PERMITS AND INSPECTIONS AS REQUIRED, ALL COSTS SHALL BE BORNE BY CONTRACTOR
- THE CONTRACTOR SHALL SECURE AND PAY FOR ALL PERMITS. LICENSES AND INSPECTIONS INCIDENTAL TO WORK UNDER THIS CONTRACT, WHEN THE WORK IS COMPLETED, THE REQUIRED CERTIFICATES OF APPROVAL SHALL BE FURNISHED TO THE BUILDING OWNER. CONTRACTOR MUST BE LICENSED IN THE STATE, COUNTY AND CITY OF THE PROJECT SITE.

CODES AND ORDINANCES

- ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH LATEST EDITION OF NEC AND ALL APPLICABLE CODES AND ORDINANCES, INCLUDING SUCH AS PERTAIN TO THE SAFETY AND HEALTH RELATIONS. CODES AND ORDINANCES SHALL TAKE PRECEDENCE OVER THE DRAWINGS AND SPECIFICATIONS ONLY IN CASE OF CONFLICT AND SHALL INCLUDE BUT NOT
- NEC NATIONAL ELECTRICAL CODE NEMA - NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
- OSHA OCCUPATIONAL SAFETY AND HEALTH ACT SBC STANDARD BUILDING CODE
- NFPA NATIONAL FIRE CODES

POST CONSTRUCTION AND PROJECT CLOSEOUT DOCUMENTATION

AS-BUILT REQUIREMENTS: DO NOT USE RECORD DOCUMENTS FOR CONSTRUCTION
PURPOSES, TO PROTECT RECORD DOCUMENTS FROM DETERIORATION AND LOSS, STORE IN
A SECURE, FIRE-RESISTANT LOCATION. PROVIDE ACCESS TO RECORD DOCUMENTS FOR THE OWNER'S REFERENCE DURING NORMAL WORKING HOURS. MAINTAIN A CLEAN. UNDAMAGED SET OF BLUE OR BLACK LINE PRINTS OF CONTRACT DRAWINGS AND SHOP DRAWINGS. MARK THE SET TO SHOW THE ACTUAL INSTALLATION WHERE THE INSTALLATION VARIES SUBSTANTIALLY FROM THE WORK AS ORIGINALLY SHOWN. MARK DRAWINGS THAT ARE MOST CAPABLE OF SHOWING CONDITIONS FULLY AND ACCURATELY. WHERE SHOP DRAWINGS ARE USED. RECORD A CROSS-REFERENCE AT THE CORRESPONDING LOCATION ON THE CONTRACT DRAWINGS, GIVE PARTICULAR ATTENTION TO CONCEALED ELEMENTS THAT WOULD BE DIFFICULT TO MEASURE AND RECORD AT A LATER DATE, MARK RECORD SETS WITH RED ERASABLE PENCIL. USE OTHER COLORS TO DISTINGUISH BETWEEN

VARIATIONS IN SEPARATE CATEGORIES OF THE WORK. MARK NEW INFORMATION THAT IS IMPORTANT TO THE OWNER BUT WAS NOT SHOWN ON THE CONTRACT DRAWNINGS, DETAILS OR SHOP DRAWNINGS. NOTE RELATED CHANGE ORDER NUMBERS WHERE APPLICABLE. NOTE RELATED RECORD DRAWING INFORMATION AND PRODUCT DATA. UPON COMPLETION OF THE WORK SUBMIT ONE (1) COMPLETE SET OF RECORD DOCUMENTS TO THE CONSTRUCTION MANAGER FOR THE OWNER'S RECORDS. CONTRACTOR SHALL SUBMIT AS-BUILT SET OF PLANS TO THE ENGINEER WITHIN 7 DAYS OF COMPLETION OF

EXISTING CONDITIONS AND DEMOLITION

- ALL ELECTRICAL DEMOLITION WORK, INCLUDING MATERIAL REMOVAL FROM THE SITE, SHALL BE THE RESPONSIBILITY OF THIS CONTRACTOR. BEFORE PROCEEDING WITH THE DEMOLITION WORK, THE CONTRACTOR SHALL OBTAIN FROM THE BUILDING OWNER ALIST OF ANY REMOVED ITEMS TO BE SALVAGED. ALL OTHER REMOVED MATERIALS AND EQUIPMENT SHALL BE PROPERLY DISCARDED OFF THE PREMISES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING PROPERTY RESULTING FROM THE CONSTRUCTION ACTIVITIES, CONTRACTOR SHALL REMOVE ALL
- EXISTING UTILITIES AND CONDITIONS ARE SHOWN FROM FIELD DATA AND EXISTING DOCUMENTS AND ARE NOT NECESSARILY COMPLETE OR ACCURATE. ALL FIELD CONDITIONS HALL BE VERIFIED BY CONTRACTOR BEFORE START OF CONSTRUCTION
- CONTRACTOR SHALL BE RESPONSIBLE TO LOCATE, EXPOSE, AND DETERMINE IF CONFLICTS EXIST WITH THE PROPOSED IMPROVEMENTS. CONTRACTOR SHALL NOTIFY THE OWNER IN ORDER TO RESOLVE ANY CONFLICTS EXISTING FLECTRICAL CONDUIT WIRING ET AGED DURING RENOVATION SHALL BE REPLACED IN LIKE KIND AND CHARA THE EXISTING UTILITY LINES, DRAIN OR FIELD TILE DAMAGED SHALL BE REPAIRED OR REPLACED, AS NEEDED, IN LIKE KIND AND CHARACTER. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL EXISTING CONDUITS. CONTROL WIRING, ETC., WHETHER SHOWN HEREON OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR ALL EXPENSES FOR REPAIR OR REPLACEMENT OF PROPERTY DAMAGED IN CONJUNCTION WITH THE EXECUTION OF WORK.
- THE CONTRACTOR SHALL NOTIFY THE OWNER OF ANY CONFLICTS OR DISCREPANCIES IN THE CONTRACT DOCUMENTS OR FIELD CONDITIONS PRIOR TO EXECUTING TH QUESTION. THE CONTRACTOR SHALL NOTIFY THE CONSTRUCTION MANAGER IF DETAILS ARE CONSIDERED UNSOUND, UNSAFE, NOT WATERPROOF, OR NOT WITHIN CUSTOMARY TRADE PRACTICE. IF WORK IS PERFORMED, IT WILL BE ASSUMED THAT THERE IS NO OBJECTION TO THE DETAIL. DETAILS ARE INTENDED TO SHOW THE END RESULT OF THE DESIGN. MINOR MODIFICATIONS MAY BE REQUIRED TO SUIT JOB CONDITIONS, AND SHALL BE INCLUDED AS PART OF THE WORK.
- SITE VISIT CONTRACTOR SHALL VISIT THE SITE AND FAMILIARIZE HIMSELF WITH ALL CONDITIONS AFFECTING HIS WORK. NO EXTRAS WILL BE PERMITTED FOR LACK OF KNOWLEDGE OF EXISTING CONDITIONS, QUANTITIES OF MATERIALS SHALL BE PER CONTRACTOR'S MEASUREMENTS.

BASIC ELECTRICAL MATERIALS AND METHODS

- WHERE STRUCTURAL OPENINGS ARE NOT AVAILABLE. THE CONTRACTOR SHALL CORE DRILL OR CUT CHASES IN WALLS AND FLOORS AS REQUIRED. ALL NEW OPENINGS SHALL BE COORDINATED WITH THE ENGINEER. ALL PENETRATIONS OF THE BUILDING WALLS, CEILING AND FLOORS, THE CONTRACTOR SHALL SEAL WITH QUALITY CAULK, FIRE RATED AND TERTIGHT, SUBMITTED FOR APPROVAL BY THE OWNER.
- TRASH REMOVAL: CONTRACTOR SHALL REMOVE ALL TRASH CREATED BY HIMSELF OR HIS SUBCONTRACTORS DUE TO DEMOLITION OR CONSTRUCTION, THE CONTRACTOR SHALL ALSO REMOVE TRASH CREATED BY OTHER SUBCONTRACTORS INCLUDING CABLE REELS. CARDBOARD BOXES AND PACKING, PROMPTLY CLEAN-UP ALL SOILING, DEBRIS AND OTHER UNSIGHTLY OR HAZARDOUS CONDITIONS, CAUSED BY WORK OR DELIVERIES UNDER THIS CONTRACT, FROM THE BUILDING GROUNDS, ENTRIES, CORRIDORS, STAIRWAYS, ELEVATORS OR OTHER PUBLIC AREAS. ALL SHALL BE REMOVED FROM THE SITE IN A TIMELY FASHION TO A LEGAL DISPOSAL FACILITY.
- SIGNAGE: CONTRACTOR SHALL MAINTAIN SECURITY AROUND PERIMETER OF CONSTRUCTION SITE DURING ALL HOURS BY INSTALLING A TEMPORARY RIBBON FOR INTERIOR WORK TO IDENTIFY CONSTRUCTION AREAS AS REQUIRED. SIGNAGE SHALL BE POSTED WITH NOTIFICATIONS OF "NO TRESPASSING" AND "CONSTRUCTION AREA"
- CHECK ACCURACY OF ALL DIMENSIONS IN THE FIELD. UNLESS SPECIFICALLY NOTED, DO NOT FABRICATE ANY MATERIALS OFF SITE, NOR DO ANY CONSTRUCTION UNTIL THE ACCURACY OF DRAWING DIMENSIONS HAVE BEEN VERIFIED AGAINST ACTUAL FIELD
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL NECESSARY CUTTING, SUBSEQUENT PATCHING AND REQUIRED FLASHING FOR ALL ITEMS NECESSARY FOR ELECTRICAL PART OF THE CONTRACT. PATCH, PAINT, AND REPAIR ANY AREA DAMAGED TO THE SATISFACTION OF
- THE EXACT LOCATIONS OF ALL FLECTRICAL DEVICES FOLIPMENT AND CONDUIT AS SHOWN ON THE DRAWING, IS APPROXIMATE. WHEN NOT SHOWN IN DETAIL, THE EXACT LOCATION OR ROUTING SHALL BE DETERMINED BY THE CONTRACTOR, SUBJECT TO THE APPROVAL OF
- THE CONTRACTOR SHALL PROVIDE ALL NECESSARY BLOCKING, BACKING, FRAMING ANGERS OR OTHER SUPPORT FOR THE MOUNTING AND SUPPORT OF ALL ITEMS REQUIRING
- TRENCHING AND BACK FILL: CONTRACTOR SHALL PROVIDE FOR ALL UNDERGROUND NSTALLED CONDUIT AND/OR CABLES INCLUDING EXCAVATION AND BACKFILLING AND
- WHEN DIRECTIONAL BORING IS REQUIRED. CONTRACTOR SHALL INSTALL A LOOSE TONING MRE WITHIN INSTALLED CONDUIT TO ALLOW FOR IDENTIFICATION OF UNDERGROUND
- 10. ALL BOLTS SHALL BE STAINLESS STEEL.
- FOR UNDERGROUND RACEWAYS, PROVIDE ADDITIONAL SLACK IN CONDUCTORS AND CONDUIT EXPANSION JOINTS IN ORDER TO ALLOW FOR EARTH MOVEMENT FROM SETTLEMENT, FROST, ETC. IN ORDER TO PREVENT DAMAGE TO THE CONDUCTORS OR TO THE EQUIPMENT CONNECTED TO THE RACEWAYS PER THE NEC.

- ALL EQUIPMENT SHALL BE DESIGNED TO OPERATE ON VOLTAGE AND PHASE SPECIFIED. CONTRACTOR FURNISHING EQUIPMENT OTHER THAN INDICATED SHALL BE RESPONSIBLE FOR ANY CHANGES IN CONDUCTORS, RACEWAYS, SWITCHES, MAIN FEEDERS, AND APPURTENANCES AND PAY ALL ASSOCIATED COSTS. REQUIREMENTS FOR ANY INCREASE IN
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION.

FIRESTOPPING AND SEALING ELECTRICAL PENETRATIONS

- CONTRACTOR SHALL FURNISH AND INSTALL FIRESTOPPING FOR SEALING AROUND ELECTRICAL PENETRATIONS THROUGH FIRE OR SMOKE BARRIERS, AND FLOORS
- PROVIDE SHOP DRAWINGS OF EACH CONDITION REQUIRING PENETRATION SEALS AND THE PROPOSED UL SYSTEMS MATERIALS, ANCHORAGE, METHODS OF INSTALLATION, AND ACTUAL ADJACENT CONSTRUCTION, SUBMITTAL PACKAGE SHALL ALSO INCLUDE A COPY OF ACTIONAL ADJACENT CONSTRUCTIONS, SOMETIME PACKAGE STRAIL ASSOCIATIONS ACCOPT OF THE ULILLUSTRATION OF EACH PROPOSED SYSTEM INDICATING MANUFACTURER APPROVED 3. MODIFICATIONS (IF APPLICABLE) AND THE MANUFACTURER'S SPECIFICATIONS, RECOMMENDATIONS, INSTALLATION INSTRUCTIONS, AND MAINTENANCE INSTRUCTIONS.
- FIRESTOPPING MATERIALS SHALL BE INTUMESCENT SAFETY BARRIERS DESIGNED TO BLOCK 4. THE SPREAD OF FIRE AND SMOKE THROUGH PENETRATIONS CREATED BY ELECTRICAL INSTALLATIONS IN FIRE RATED WALLS AND FLOORS. MATERIALS SHALL BE FLAME, TOXIC FUME AND WATER RESISTANT AND SHALL HAVE A MINIMUM 3 HOUR FIRE RATING. FIRE RATING SHALL BE DEFINED BY TESTS CONDUCTED BY ASTM. UL OR OTHER TESTING AND INSPECTION AGENCIES ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION
- PROVIDE MATERIALS BY THE FOLLOWING MANUFACTURERS TO SUIT THE APPLICATION SPECIFIED TECHNOLOGIES, INC (STI), SOMERVILLE, NJ; TREMCO, INC., BEACHWOOD, OH; OR

FAULT CURRENT, COORDINATION STUDY, AND ARC FLASH

- CONTRACTOR SHALL CONDUCT A FAULT CURRENT CALCULATION ON ALL EQUIPMENT AND MARK AS REQUIRED PER THE N.E.C.
- CONTRACTOR SHALL PROVIDE AN ARC-FLASH STUDY AND LABEL ALL EQUIPMENT AS

GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS

- ALL RACEWAYS AND EQUIPMENT SHALL BE GROUNDED IN ACCORDANCE WITH THE N.E.C.
- ALL CONDUITS SHALL CONTAIN A CODE SIZE GROUNDING CONDUCTOR.
- EQUIPMENT GROUNDING CONDUCTORS SHALL BE INSULATED WITH GREEN-COLORED INSULATION.
- GROUNDING ELECTRODE CONDUCTORS SHALL BE STRANDED CABLE.
- MATERIALS AND CONNECTION COMPONENTS FOR GROUNDING AND BONDING SHALL BE MANUFACTURED BY ERICO, THOMAS & BETTS, OR BURNDY.
- GROUND-FAULT PROTECTION OF FOUIPMENT SHALL BE PROVIDED FOR SERVICE DISCONNECTS RATED 1000 OR MORE. THE GROUND-FAULT PROTECTION SYSTEM SHALL BE PERFORMANCE TESTED WHEN FIRST INSTALLED ON SITE. THE TEST SHALL BE CONDUCTED IN ACCORDANCE MATERIAL PROPERTY. IN ACCORDANCE WITH INSTRUCTIONS THAT SHALL BE PROVIDED WITH THE EQUIPMENT, A WRITTEN RECORD OF THIS TEST SHALL BE MADE AND SHALL BE AVAILABLE TO THE
- ALL HARDWARE SHALL BE STAINLESS STEEL 3/8" DIAMETER OR LARGER. ALL HARDWARE 18-8 STAINLESS STEEL INCLUDING LOCK WASHERS, COAT ALL SURFACES WITH AN ANTI-OXIDANT
- FOR GROUND BOND TO STEEL ONLY: INSERT A CADMIUM FLAT WASHER BETWEEN LUG AND STEEL COAT ALL SURFACES WITH AN ANTI-OXIDANT COMPOUND BEFORE MATING
- NUT & WASHER SHALL REPLACED ON THE FRONT SIDE OF THE GROUND BAR AND BOLTED ON THE BACK SIDE. INSTALL BLACK HEAT-SHRINKING TUBE, ON ALL GROUND TERMINA THE INTENT IS TO WEATHERPROOF THE COMPRESSION CONNECTION.
- ENSURE THE WIRE INSULATION TERMINATION IS WITHIN 1/8" OF THE BARREL (NO SHINERS).
- ALL GROUNDING HARDWARE SUPPLIED AND INSTALLED BY CONTRACTOR

ELECTRICAL IDENTIFICATION

- PROVIDE NAMEPLATES FOR ALL MAJOR ELECTRICAL EQUIPMENT AND ON EQUIPMENT AS
- PROVIDE ALL FEEDERS AND BRANCH CIRCUIT WIRING WITH COLOR CODED VINYL TAPE WRAPPED A MINIMUM OF 1.5 TIMES AROUND CIRCUMFERENCE OF JACKET/SHIELDING TO DESIGNATE PHASE.
- COLOR CODING OF CONDUCTORS SHALL BE PER NEC REQUIREMENTS
- CONTRACTOR SHALL PLACE TWO LENGTHS OF WARNING TAPE AT A DEPTH OF 12" BELOW GROUND AND DIRECTLY ABOVE ELECTRICAL SERVICE CONDUITS. CAUTIONS TAPE TO READ CAUTION BURIED ELECTRIC

CONDUCTORS AND CABLES

- WIRING ALL CONDUCTORS SHALL BE EQUAL TO OR BETTER THAN MINIMUM #12 AWG FOR POWER, #14 AWG FOR CONTROL WITH 98% CONDUCTIVITY STRANDED COPPER, 600V, COLOR CODED, UNLESS NOTED ALUMINUM (AL), REFER TO "ALUMINUM CONDUCTOR REQUIREMENTS" THIS SHEET. PROVIDE 75°C RATED CONDUCTORS FOR AMPACITIES ABOVE 100A AND 60°C RATED CONDUCTORS FOR AMPACITIES OF 100 AMPS OR LESS. PROVIDE SOLID OR STRANDED FOR #10 AWG AND SMALLER. STRANDED FOR #8 AWG AND LARGER UNLESS NOTED OTHERWISE ON DRAWINGS.
- WIRE SIZE OF BRANCH CIRCUITS SHALL BE ADJUSTED TO COMPENSATE FOR VOLTAGE DROP BASED UPON ACTUAL CONDUIT ROUTING. CONTRACTOR SHALL MAINTAIN VOLTAGE DROF AS RECOMMENDED BY N.E.C. (NOT TO EXCEED 3%).
- PROVIDE A SEPARATE NEUTRAL FOR EACH BRANCH CIRCUIT, FEEDER, ETC. NEUTRALS ARE NOT PERMITTED TO BE SHARED.
- CONNECTORS FOR POWER CONDUCTORS: CONTRACTOR SHALL USE PRESSURE TYPE INSULATED TWIST-ON CONNECTORS FOR NO. 10 AWG AND SMALLER. USE SOLDERLESS MECHANICAL TERMINAL LUGS FOR NO. 8 AWG AND LARGER.
- ALL CONNECTIONS SHALL BE MADE WITH A PROTECTIVE COATING OF AN ANTI-OXIDE COMPOUND SUCH AS "NO-OXIDE A" BY DEARBORNE CHEMICAL CO. COAT ALL WIRE SURFACES BEFORE CONNECTING, EXPOSED COPPER SURFACES, INCLUDING GROUND BARS. SHALL BE TREATED - NO SUBSTITUTIONS.
- CABLES MC CABLE IS NOT PERMITTED
- PROVIDE WIRE AND CABLE MANUFACTURED BY ONE OF THE FOLLOWING: AMERICAN INSULATED WIRE CORPORATION; NEXANS; CERROWIRE; SOUTHWIRE; OR ENCORE WIRE.
- PROVIDE CONNECTORS MANUFACTURED BY ONE OF THE FOLLOWING: AMP INCORPORATED; GENERAL SIGNAL, O-Z/GEDNEY UNIT: SQUARE D COMPANY, ANDERSON: ILSCO: OR BURNDY,

ALUMINUM CONDUCTOR REQUIREMENTS

- ALUMINUM CONDUCTOR GRADE SHALL BE MINIMUM AA-8000 OR THE NEWEST ALUMINUM CONDUCTOR SPECIFICATION BEING USED BY THE INDUSTRY.
- THE CONTRACTOR SHALL ABIDE BY ALL ARTICLES RELATED TO ALUMINUM CONDUCTORS IN
- ALUMINUM CONDUCTORS SHALL ONLY BE TERMINATED USING ALUMINUM RATED CONNECTIONS, CONTRACTOR SHALL VERIFY TERMINATIONS ON EACH DEVICE OR EQUIPMENT BEFORE START OF WORK FOR RATED ALUMINUM CONNECTORS.
- ALL ALUMINUM (AI) CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION, ALL OTHER CONDUCTORS ARE COPPER UNLESS NOTED OTHERWISE
- THE CONTRACTOR SHALL ABIDE BY ALL ALUMINUM WIRING INSTALLATION STANDARDS AS REQUIRED BY THE NEIS (NATIONAL ELECTRICAL INSTALLATION STANDARDS) PUBLISHED BY THE NECA (NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION). THE CONTRACTOR SHALL ABIDE BY ALL STANDARDS IN THE NECA / AA - 2006, WHICH DEFINES MINIMUM STANDARDS OF QUALITY AND WORKMANSHIP. A SUMMARY OF SOME OF THE REQUIREMENTS FOLLOW:
- TERMINATE WITH COMPRESSION CONNECTORS NO RING CUTS OF THE INSULATION, CRIMP TERMINALE WITH A CRIMP FOOL AND THE CORRECT DIE AS REQUIRED BY THE MANUFACTURER. ALL CONDUCTORS TO RECEIVE ANTI-OXIDATIVE COATING DURING INSTALLATION. TERMINATING WITH A SET SCREW CONNECTOR, THE SCREW SHALL BE TIGHTENED USING
- ONLY A TORQUE WRENCH.
- NECA / AA RECOMMENDS BELLVILLE WASHERS WHEN CONNECTING ALUMINUM
- CONDUCTORS TO COPPER BUS BARS. ABIDE BY ALL NECA / AA RECOMMENDATIONS.
 DO NOT USE PIN CONNECTORS (WIRE ADAPTERS) UNLESS ABSOLUTELY NECESSARY. USE ALL / ANY OTHER OPTIONS, AND IF REQUIRED, PROVE TO ENGINEER BEFORE INSTALLING, IF USED FOLLOW U.L. GUIDE FOR WIRE CONNECTORS (ZMOW), AND PROVIDE THE SPECIAL TOOLS REQUIRED BY THE MANUFACTURER. DIE-LESS CRIMPERS WILL NOT BE ACCEPTED

RACEWAY AND BOXES

- RACEWAYS: UNLESS NOTED OTHERWISE, ALL EXPOSED CONDUIT SHALL BE R.G.S. AND COVERED 6" BELOW FINISHED GRADE TO BE PVC. SCHEDULE 40. PROVIDE WEATHERPROOF FLEX CONNECTIONS WHERE REQUIRED. CONTRACTOR SHALL PROVIDE JUNCTION AND/OR PILLE BOXES WHERE REQUIRED. CONTRACTOR SHALL PROVIDE JUNCTION AND/OR PULL BOXES WHERE SHOWN ON THE DRAWINGS, OR AS REQUIRED, WHETHER SHOWN ON THE DRAWINGS OR NOT, AND SIZED PER N.E.C. PROVIDE NON-METALLIC ENCLOSURE WITH OPEN BOTTOM AND GASKETED COVER MANUFACTURED BY QUAZITE OR EQUIVALENT WITH DRIVE-OVER COVER ABI E TO WITHSTAND OCCASIONAL NON-DELIBERATE LIGHT VEHICULAR TRAFFIC LABEL COVER TO SUIT INSTALLATION (I.E. "POWER" "COMMUNICATIONS" "LIGHTING", ETC.) AND INSTALL PER MANUFACTURER'S RECOMMENDATIONS.
- ABOVE GRADE: R.G.S.
- BELOW GRADE: SCHEDULE 40 PVC (UNLESS NOTED OTHERWISE)
- ALL WIRING SHALL BE INSTALLED IN CONDUIT. ALL CONDUIT SHALL BE A MINIMUM OF 3/4".
- CONTRACTOR SHALL PLUG AND CAP EACH END OF SPARE AND EMPTY CONDUITS AND PROVIDE TWO SEPARATE PULL STRINGS 200 LBS TEST POLYETHYLENE CORD. CONTRACTOR SHALL PROVIDE MANUFACTURED LONG RADIUS BENDS FOR ALL CONDUITS. RGS CONDUITS WHEN SPECIFIED SHALL MEET UL-6 FOR GALVANIZED STEEL, ALL FITTINGS SHALL BE SUITABLE FOR USE WITH THREADED RIGID CONDUIT. COAT ALL THREADS WITH
- OUTLET BOXES SHALL BE CAST ALLOY WITH THREADED HUBS IN WET/DAMP LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
- PROVIDE METAL CONDUIT AND TUBING MANUFACTURED BY ONE OF THE FOLLOWING ALFLEX CORPORATION: ANAMET INCORPORATED, ANACONDA METAL HOSE: ANIXTER BROTHERS INCORPORATED; CAROL CABLE COMPANY INCORPORATED; ELECTRI-FLEX COMPANY; GRINNELL COMPANY, ALLIED TUBE AND CONDUIT DIVISION; MONOGRAM COMPANY, AFC; REPUBLIC CONDUIT; OR WHEATLAND TUBE COMPANY
- PROVIDE NONMETALLIC CONDUIT AND TUBING MANUFACTURED BY ONE OF THE FOLLOWING ANAMET INCORPORATED, ANACONDA METAL HOSE: CANTEX INDUSTRIES, HARSCO CORPORATION; CONDUX INTERNATIONAL, ELECTRICAL PRODUCTS; HUBBELL INCORPORATED, RACO, INCORPORATED; THOMAS & BETTS CORPORATION, CARLON ELECTRICAL PRODUCTS; OR O-Z/GEDNEY, UNIT OF GENERAL SIGNAL.
- PROVIDE CONDUIT BODIES AND FITTINGS MANUFACTURED BY ONE OF THE FOLLOWING: CROUSE-HINDS, DIVISION OF COOPER INDUSTRIES; EMERSON ELECTRIC COMPANY APPLETON ELECTRIC COMPANY: HUBBELL INCORPORATED, KILLARK ELECTRIC
 MANUFACTURING COMPANY: THOMAS & BETTS CORPORATION, CARLON ELECTRICAL PRODUCTS: OR O-Z/GEDNEY, UNIT OF GENERAL SIGNAL.
- PROVIDE METAL WIREWAYS MANUFACTURED BY ONE OF THE FOLLOWING: HOFFMAN ENGINEERING COMPANY: KEYSTONE/REES, INCORPORATED: OR SQUARE D COMPANY
- PROVIDE BOXES, ENCLOSURES, AND CABINETS MANUFACTURED BY ONE OF THE FOLLOWING: CROUSE-HINDS, DIVISION OF COOPER INDUSTRIES; HOFFMAN ENGINEERING COMPANY, FEDERAL-HOFFMAN INCORPORATED; HUBBELL INCORPORATED, RACO INCORPORATED: THOMAS & BETTS, CARLON ELECTRICAL PRODUCTS: O-Z/GEDNEY. UNIT OF GENERAL SIGNAL; ROBROY INDUSTRIES INCORPORATED, ELECTRICAL DIVISION; OR SCOTT

SAFETY SWITCHES

ALL DISCONNECT SWITCHES SHALL BE HEAVY-DUTY CONSTRUCTION WITH LOCKABLE HANDLES SIZED AS NOTED ON THE DRAWINGS AND/OR RISER DIAGRAM. PROVIDE NEMA ENCLOSURE AS REQUIRED BY EXPOSURE TYPE. ALL FUSIBLE SWITCHES SHALL BE PROVIDED WITH DUAL ELEMENT FUSES SIZED PER THE EQUIPMENT MANUFACTURER'S

FUSES

- FUSES SHALL BE DUAL ELEMENT. TIME DELAY CURRENT LIMITING. CONTRACTOR SHALL COORDINATE FUSE SIZES WITH EQUIPMENT MANUFACTURER'S REQUIREMENTS AND PER
- PROVIDE FUSES MANUFACTURED FROM ONE OF THE FOLLOWING: COOPER BUSSMAN INCORPORATED; EAGLE ELECTRIC MANUFACTURING COMPANY INCORPORATED, COOPER INDUSTRIES INCORPORATED: FERRAZ SHAWMUT INCORPORATED.

GPD GROUP INC

Akron, OH 44311 330.572.2100 Fax 330.572.2101



STEVEN P. SCHAUE





 $\overline{\mathbf{x}}$

8

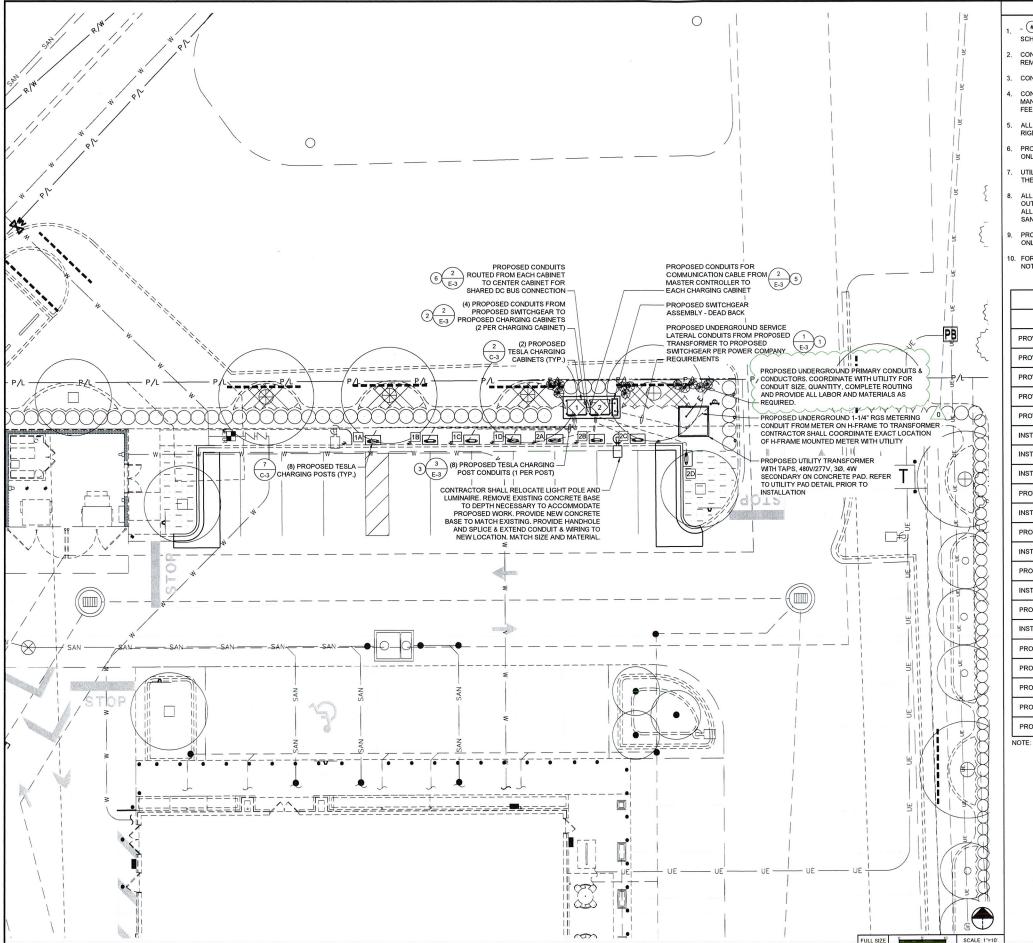
9

HIATUS R LA STATION) E PINES, FL 3 S S S ELEC

NOT

ISSUED FOR CONSTRUCTION XXX XXX RECORD

JJR 2020141.73



GENERAL SHEET NOTES

- 1. "#" DENOTES FEEDER REFERENCE. REFER TO SHEET E-2 FOR FEEDER/CIRCUIT SCHEDULE.
- . CONTRACTOR SHALL REFER TO CIVIL SHEETS FOR EXISTING LANDSCAPING TO REMAIN AND PROPOSED LANDSCAPING.
- CONTRACTOR SHALL HAND DIG AROUND ALL EXISTING UTILITIES.
- 4. CONDUIT ELBOWS SHALL BE SIZED PER NEC, CONTRACTOR SHALL VERIFY MANUFACTURER ALLOWABLE FILL AND MINIMUM CONDUCTOR BENDING RADIUS, SEE FEEDER SCHEDULE FOR CONDUIT & CONDUCTOR SPECIFICATIONS.
- ALL CONDUITS ACCESSIBLE TO THE PUBLIC OR WHICH CAN BE DAMAGED SHALL BE RIGID GALVANIZED STEEL.
- 6. PROPERTY LINE AND RIGHT-OF-WAY BOUNDARIES ARE SHOWN FOR REFERENCE ONLY. REFER TO WAWA SITE PLAN BY BOHLER ENGINEERING FOR EXACT LOCATION.
- 7. UTILITY EQUIPMENT INSTALLATIONS AND PREP WORK SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY ENGINEER TO ENSURE ACCURACY OF INSTALLATION.
- 8. ALL PROPOSED CONDUITS MUST MEET MINIMUM DEPTH REQUIREMENTS AS OUTLINED IN TRENCH DETAILS, AS WELL AS MAINTAIN A MINIMUM OF 18" CLEAR OF ALL EXISTING OBSTRUCTIONS INCLUDING (BUT NOT LIMITED TO) STORM PIPES, SANITARY PIPES, WATER LINES AND OTHER UNDERGROUND UTILITIES.
- 9. PROPERTY LINE AND RIGHT-OF-WAY BOUNDARIES ARE SHOWN FOR REFERENCE ONLY. REFER TO SURVEY BY OTHERS FOR EXACT LOCATION.
- FOR TRAFFIC CONTROL PROCEDURES (IF APPLICABLE), SEE TRAFFIC CONTROL NOTES ON SHEET GN-1.

ELECTRICAL SCOPE OF WORK RESPO	NSIBILITIE	ΞS
SCOPE	BY UTILITY	BY CONTRACTOR
PROVIDE PRIMARY SIDE TRENCHING		x
PROVIDE & INSTALL PRIMARY SIDE CONDUITS W/ PULLWIRE		х
PROVIDE & INSTALL PRIMARY SIDE CONDUCTORS	Х	
PROVIDE & INSTALL UTILITY TRANSFORMER PAD		х
PROVIDE UTILITY TRANSFORMER	Х	
INSTALL UTILITY TRANSFORMER	Х	
INSTALL CONNECTIONS AT UTILITY TRANSFORMER (PRIMARY)	Х	
INSTALL CONNECTIONS AT UTILITY TRANSFORMER (SECONDARY)	Х	,
PROVIDE METER PEDESTAL		х
INSTALL METER PEDESTAL		х
PROVIDE METER BASE		х
INSTALL METER BASE		х
PROVIDE METER	Х	
INSTALL METER	Х	
PROVIDE CTs	Х	
INSTALL CTs (INSIDE TRANSFORMER)	30	х
PROVIDE SECONDARY SIDE TRENCHING		х
PROVIDE & INSTALL SECONDARY SIDE CONDUITS W/ PULLWIRE		х
PROVIDE & INSTALL SECONDARY SIDE CONDUCTORS		х
PROVIDE ROAD CUTS / ROAD BORES		х
PROVIDE & INSTALL PAVEMENT REPLACEMENT		х

NOTE: SCOPE SHOWN ABOVE WAS PROVIDED BY FPL. FIELD VERIFY PRIOR TO CONSTRUCTION.

POWER COMPANY CONTACTS

FPL ATTN: FAVYAN TORRES (954) 224-2448 FAVYAN.TORRES@FPL.COM GPD GROUP, INC.

520 South Main Street, Suite 2531 Akron, OH 44311 330.572.2100 Fax 330.572.2101



500 DEER CREEK RD ALO ALTO, CA 94304

STEVEN P. SCHAUB

LICENSE No. 75207





1600 S HIATUS RD (TESLA STATION) PEMBROKE PINES, FL 33025

ELECTRICAL EQUIPMENT PLAN

ISSUED FOR:	
PERMIT	xxx
BID	XXX
CONSTRUCTION	XXX
RECORD	XXX

DAVID HERNANDEZ JJR

2020141.73

E-1

TESLA V3 CHARGING CABINET & POST ELECTRICAL SPECS								
CHARGE POST MODEL	AC INPUT VOLTAGE TO CABINET	kVA INPUT TO CABINET	AC INPUT CURRENT TO CABINET	DC OUTPUT VOLTAGE TO CHARGE POST	DC OUTPUT CURRENT TO CHARGE POST	DC SHARED BUS CURRENT	SHORT CIRCUI CURRENT RATING	
V3	380V-480V	387kVA*	465A*	0V - 500V	350A	640A	85 KAIC	

(TOTAL OF 8) TYPICAL OF 4

POSTS PER CABINET

				BREAKER S	ETTINGS			
BREAKER USE	BREAKER SIZE	ŀ (A)	t (s) @ 6 t	L _{sd} (x l _n)	t _{sd} (s)	l (x l ₂)	l³ (х l²)	t _g (s)
V3 BRANCH CIRCUIT	600A	х	х	х	х	5	х	х

FEEDER/CIRCUIT SCHEDULE NO CONFIGURATION 3) 500 MCM AI (XHHW-2, 90°C) (1) (1) 500 MCM AI NEUT (XHHW-2, 90°C) (4) SETS - EACH IN 4" PVC CONDUIT 3) 500 MCM AI (XHHW-2, 90°C)) 500 MCM AI NEUT (XHHW-2, 90°C) 1) #1 AWG Cu GND (XHHW-2, 90°C) 2) SETS - EACH IN 4" PVC CONDUIT OR " NON-METALLIC FLEXIBLE 90° CONDUIT RATED FOR DIRECT BURIAL (4) 350 MCM AI (XHHW-2, 90°, 1000V RATED) 1) #1 AWG Cu GND (XHHW-2, 90°, 1000V RATED) 1) 1000V, CLASS 1, COMM CABLE 1) SET IN 4" PVC CONDUIT OR 4" NON-METALLIC FLEXIBLE 90° CONDUIT RATED FOR DIRECT BURIAL (4) FACTORY INSTALLED WRING OUTDOOR RATED/SHIELDED CAT5e OR CAT6 COMMUNICATION CABLE IN 1" PVC CONDUIT. (2) 600 MCM AI (XHHW-2, 90°, 1000V RATED) (1) #3/0 AWG AI DC MID (XHHW-2, 90°, 1000V RATED) (1) #1/0 AWG CU GND (XHHW-2, 90°, 1000V RATED) (2) SETS - EACH IN 3° PVC CONDUIT. (1) #3/0 AWG ALDC MID DISC. (XHHW-2, 1000V RATED) 36" LONG IN EA. CABINET, NOT ROUTED IN CONDUIT

ALL AC CONDUCTORS SHALL BE RATED @ 600 VOLTS. ALL DC CONDUCTORS SHALL BE RATED @ 1000 VOLTS. GPD GROUP, INC.

520 South Main Street, Suite 2531 Akron, OH 44311 330.572.2100 Fax 330.572.2101



STEVEN P. SCHAUB LICENSE No. 75207

_					_		_
DESCRIPTION	04.07.21 ISSUED FOR 50% REVIEW	ISSUED FOR SIGNED AND SEALED	07.07.21 ISSUED FOR SIGNED AND SEALED				
REV. DATE	04.07.21	04.28.21	07.07.21				
REV.	٩	m	0				

GENERAL SHEET NOTES

- NEUTRAL MUST BE INCLUDED FOR PROPER OPERATION OF TESLA SUPERCHARGERS.
- PROPOSED UTILITY CTs SHALL BE LOCATED IN UTILITY APPROVED CT COMPARTMENTS MOUNTED IN TRANSFORMER. PROPOSED METER SHALL BE MOUNTED ON H-FRAME.
- ALL CONDUIT FURNISHED AND INSTALLED BY CONTRACTOR.
- ALL WIRING FURNISHED BY TESLA AND INSTALLED BY CONTRACTOR UNLESS NOTED OTHERWISE. SEE SHEET EN-1 FOR UTILITY/CONTRACTOR SCOPE OF WORK.
- THE TESLA PROVIDED CHARGING CABINETS AND THE CHARGING POSTS USED ON THIS PROJECT COMPLY WITH THE FOLLOWING STANDARDS:

 TUV CERTIFIED TO UL 2202
- THE AFOREMENTIONED STANDARDS IDENTIFY THE REQUIREMENTS MET BY THE TUV PROTECTION AGAINST ELECTRIC SHOCK
 OVERLOAD AND SHORT CIRCUIT PROTECTION

- FAULT PROTECTION
- DEGREES OF PROTECTION AGAINST ACCESS TO HAZARDOUS LIVE PARTS
 THE INTERNAL COMPONENTS OF THE SYSTEM ARE PROPRIETARY, ANY QUESTIONS CONCERNING ACTUAL INTERNAL PROTECTIVE DEVICES MUST BE COORDINATED DIRECTLY WITH TESLA.
- INTERLOCK THAT DE-ENERGIZES THE ELECTRIC VEHICLE CONNECTOR WHENEVER THE ELECTRICAL CONNECTOR IS UNCOUPLED FROM THE ELECTRIC VEHICLE

 AUTOMATIC DE-ENERGIZATION OF CHARGING POST CABLE UPON EXPOSURE TO
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED, LISTED, OR CERTIFIED BY A NATIONALLY RECOGNIZED TESTING LABORATORY ACCREDITED BY THE UNITED STATES OCCUPATIONAL SAFETY HEALTH ADMINISTRATION.
- REFER TO THIS SHEET FOR FAULT CURRENT CALCULATIONS, CONTRACTOR SHALL MARK ON ALL EQUIPMENT AS REQUIRED PER N.E.C.
- REFER TO SHEET E-3 FOR ARC FLASH LABEL DETAILS. CONTRACTOR SHALL LABEL ALL EQUIPMENT AS REQUIRED PER N.E.C.

$\overline{\mathbf{x}}$ HIATUS R LA STATION) E PINES, FL 3: 1600 S I (TESLA PEMBROKE

GRAM IE DIAG SCHEI ONE-LINE & PANEL

ISSUED FOR:	
PERMIT	xxx
BID	xxx
CONSTRUCTION	xxx
RECORD	xxx
INSTALL MANAGER	DESIGNER
DAVID	LIP

HERNANDEZ 2020141.73

CHARGING CABINE1 #2 29.00 11 13 15 15 17 19 21 22 23 25 27 20.00 29 31 33 30.00 30/2 37 30/2 39 0.00 SPACE SPACE SPACE 0.00 SPACE SPACE SPACE SPACE 0.10 MASTER CONTROLLER SPACE 0.10 30/2 39 0.00 30/1 41 SPARE SPARE 258.10 258.10 258.00 kVA 258.10 258.10 258.00 AMPS 931.77 931.77 931.41 125% COLT. LOAD CALC TO UTLITY XFAIR TOTAL kVA 967.75 TOTAL AMPS 931.22 TOTAL AMPS 1164.02 VOLTAGE 480 V/ 277 PHASE 3 No OF WIRES 4 NEMA 3R ENCLOSURE MAIN____C/B ____POLES ___LUGS __BUS ____1200_AMPS 65 KAIC SPD SERVICE ELITRALICE RATED _____ ISOLATED GROUNDED BUS SURFACE PANEL BOARD NOTES CIRCUITS SHALL BE REARRANGED AS REQUIRED TO MAINTAIN THE MOST BALANCED LOADS ON EACH PHASE WITHIN

PANEL 'MDP'

 Phase
 Phase
 Phase
 CKT.

 A
 B
 C
 BKR /

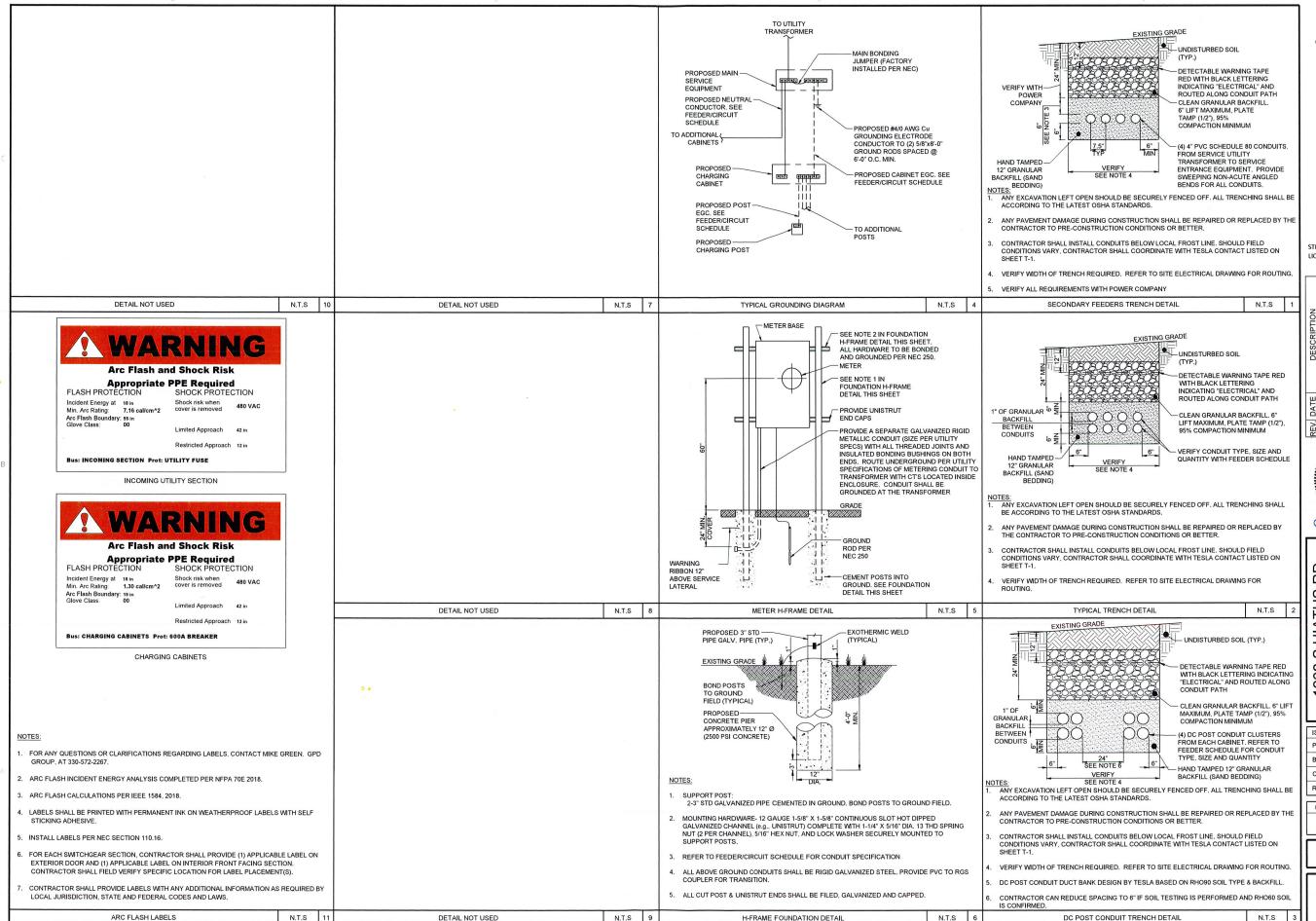
 kVA
 kVA
 kVA
 Poles

DESCRIPTION

CHARGING CABINET #1

- EACH PANEL. PROVIDE TYPED PANEL DIRECTORY MOUNTED PER MANUFACTURERS RECOMMENDATIONS WITH SERVICE
- 2. OCPD FOR CHARGING CABINETS ARE CALCULATED AS FOLLOWS: 465A AC INPUT TO CABINET x 1.25 = 581.25A ==> 600A BRANCH BREAKER REQUIRED

~~~~	~~~~						
AVAILABLE FAULT	AVAILABLE FAULT CURRENT (AMPS)						
1	16,492						
2	16,282						
3	16,034						



N.T.S 9

H-FRAME FOUNDATION DETAIL

N.T.S

DC POST CONDUIT TRENCH DETAIL

DETAIL NOT USED

GPD GROUP, INC. 520 South Main Street, Suite 2531 Akron, OH 44311 330.572.2100 Fax 330.572.2101

TESLA

STEVEN P. SCHAUR LICENSE No. 75207

No 75207 STATE OF 08/16/2021

R HIATUS A STATIC PINES, I S S 900

ISSUED FOR PERMIT XXX XXX CONSTRUCTION RECORD XXX

ELECTRICAL DETAILS

INSTALL MANAGER DESIGNER JJR HERNANDEZ

JOB NO. 2020141.73